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**Attachment in psychological therapy:
An exploratory study into patient and therapist
attachment patterns and their relationship with
early engagement and therapeutic alliance**

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*Submitted in part fulfilment of the degree of
Doctorate in Clinical Psychology*

The University of Edinburgh
2012

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ABSTRACT

Background. Recent research into attachment theory has suggested it provides a useful framework for understanding the psychological therapeutic process. Clinical application of attachment theory has been a recent development in adult mental health research. Previous studies have focused on patient attachment styles and a systematic review of the literature highlights the limited research that explores both patient and clinician attachment patterns. The reported study aims to explore both patient and therapist attachment and the dyadic interaction on the therapeutic process, and, in particular, how attachment influences the early engagement and development of the therapeutic alliance.

Methods. Patient participants and clinician participants completed a self-report measure of attachment prior to commencing a psychological intervention. Early engagement was measured through appointment attendance and independent therapeutic alliance ratings from patients and clinicians were completed after the third appointment. Correlations and regression analysis explored the extent to which patient and clinician attachment predicts early engagement and the therapeutic alliance.

Results. Fifty-five patients and 38 clinician's self-report attachment styles indicate greater security amongst clinicians. Patients presenting to mental health services reported higher levels of anxious and avoidant attachment patterns, which were predictive of greater psychological distress. Patient avoidant attachment was associated with poor engagement and both patient anxiety and avoidance attachment were predictive of therapeutic alliance. No relationship was found between therapist attachment and early engagement or therapeutic alliance, and there were no significant interactions between patient and therapist attachments patterns.

Conclusions. Findings from the current study suggest that patient attachment style is predictive of reported psychological distress, early engagement and therapeutic alliance. Applying the principles of attachment theory to clinical practice could therefore provide greater insight into the interpersonal dynamics between patient and therapist and help inform services as to how to improve engagement and alliance with insecure patients. The strengths and weaknesses of the study are discussed, which highlights the need for further research with larger samples to build on the current limited findings.

1. SYSTEMATIC LITERATURE REVIEW

The role of patient and clinician attachment styles on the psychological therapy process: A systematic review

1.1 ABSTRACT

Background. The attachment style of individuals engaging in psychological therapy has been considered relevant to the process, with higher levels of insecure attachment associated with less positive and more difficult experiences. However, clinician attachment style may also be relevant to this process, specifically in relation to how both attachment styles interact during the therapeutic process. Less is known about this interaction process, however, and the research literature where both clinician and patient attachment styles are examined has not been systematically reviewed.

Method. A systematic literature search for research examining both patient and clinician attachment was conducted. The search was performed on multiple electronic databases, which was supplemented by scanning the reference lists of articles identified for review. Quality of the articles was rated on a critical appraisal checklist that was developed through consultation of CRD, SIGN and STROBE guidelines.

Results. Eleven studies met the inclusion criteria. These studies were conceptualised into two main themes --- i) therapeutic reactions and responses and ii) therapeutic alliance ---- and were critically reviewed.

Conclusions. Overall, attachment security (of both patients and clinicians) was associated with more positive therapeutic experiences and stronger working alliance. Some tentative findings suggest contrasting attachment styles were more effective in the therapeutic process and formation of alliance. However, low methodological quality limited the number of conclusions that could be drawn. Further robust evidence is therefore required to explore the interaction of attachment patterns in psychological therapy, to provide more conclusive findings.

1.2 Introduction

Although there is an increasing evidence base to support psychological therapies (Roth & Fonagy, 2005) uncertainty remains over the individual differences that influence engagement and the process of therapy. The therapeutic relationship is considered to be one major influential aspect (Norcross, 2002), although factors that contribute to its formation are less well understood (Horvath *et al.*, 2011). Given the collaborative process of psychological therapies, however, its course and development are likely to be influenced by both patient and clinician attributes and also the interaction between them. A number of individual variables have been explored in relation to this, including patient and therapist beliefs, personality traits and similarities (Crastopol, 2001; Reis & Brown, 1999). However, one area of research that has received more recent interest is the role of individual attachment styles on psychological therapies.

Given the close, care-seeking / care-giving nature of the therapeutic process, the clinician's role has been paralleled to that of an attachment figure to the patient, providing '*a secure base*' for the exploration of difficult and distressing experiences (Bowlby, 1988). Furthermore, help-seeking and the process of engaging with a mental health professional or service could be considered essential attachment behaviours. Therefore, conceptualising the therapeutic relationship as an adult attachment relationship has emerged as a potentially useful model for understanding the interpersonal dynamics of psychological interventions (Goodwin, 2003).

Although attachment theory has primarily focused on infant and caregiver relationships, it can also offer a framework for understanding how adults form and develop therapeutic relationships. Bowlby's attachment theory explains how early caregiving relationship experiences shape the individual attachment patterns, which are then applied to future close relationships throughout the lifespan. Conceptualised as 'internal working models' these attachment patterns provide a system for individuals to perceive and respond to interpersonal information and lay the foundation for the development of mental representations of the 'self' and 'others' (Bowlby, 1969/1982).

Secure attachment patterns develop in conditions where infants experience their attachment figures as available, responsive and able to minimise danger and distress. Individuals with secure internal working models will therefore seek proximity to attachment figures to relieve

distress and form positive expectations for future relationships (Bowlby, 1988). However, if an infant experiences any disruptions in the attentiveness and reliability of the caregiver in childhood, insecure attachment patterns can emerge. As a result of their negative working models, insecure individuals may develop alternative strategies during times of distress and form negative views of future relationships (Mikulincer & Shaver, 2007). In the case of avoidant attachment patterns, rather than seeking proximity to attachment figures, individuals deny their attachment needs and attempt to become self-reliant. In stark contrast, individuals with anxious attachment patterns can become overly dependent on others and excessively seek proximity to attachment figures.

Given the negative representations of self and others that develop, individuals with insecure attachment patterns are therefore more likely to find it difficult to trust and rely on others (Liotti, 2007). Interpersonal difficulties and related social isolation can increase vulnerability to the development of mental health problems and there are a growing number of studies that report connections between insecure attachment patterns, psychopathology and psychological problems (Daniel, 2006). Furthermore, individuals with insecure attachment may be less likely to seek help from others (Vogel & Wei, 2005) and their internal negative representations may also interfere with their experience of the therapeutic process as valuable or helpful (Romano *et al.*, 2008).

As the development of many psychological disorders is considered to stem from insecure attachments, the related difficulties are likely to be intertwined with an insecure working model (Dozier *et al.*, 1999), thus making engaging in treatment and forming therapeutic alliance more challenging. Further difficulties are more likely to emerge if the insecure patient's working model is confirmed through the process of therapy, resulting in disengagement or a therapeutic stalemate (Liotti, 2007). Attachment issues can therefore make engaging with clinical services extremely challenging, resulting in the more vulnerable individuals most in need of help, failing to access or utilise the support available to them.

Initial research, therefore, suggests patient attachment patterns may be relevant to engagement, the process and outcomes of psychological therapies (Levy *et al.*, 2011). The role of attachment behaviours can perhaps be better understood when considering the distressing experience of suffering from mental health difficulties in association with the intimate and often challenging aspect to engaging with psychological therapies. Under these conditions of distress and perceived threat, attachment behaviours are likely to be activated,

where higher levels of care and felt security is required (Daniel, 2006). Having an understanding of an individual's attachment behaviours could therefore enhance awareness of how they might respond to therapy and help to anticipate potential challenges and ruptures within the psychological process (Goodwin, 2003).

Given the fundamental interpersonal process and interaction of psychological therapies, research into the influence and role of attachment styles is surprisingly sparse (McBride *et al.*, 2006). The majority of research has focused on client attachment styles and therapeutic alliance. In a systematic review of eighteen articles on client self rated adult attachment patterns and the therapeutic alliance, Smith *et al.*, (2010) found strong evidence to link secure client attachment to good quality therapeutic alliance. In a similar review of seventeen articles, (Diener & Monroe, 2011) also reported comparable findings with secure patient attachment related to stronger therapeutic alliance. Given the robustness of alliance as a predictor of treatment outcomes (Safran & Muran, 2000), these findings highlight the potential attachment patterns can have on the therapeutic process.

The current research on adult attachment and psychological therapies has also largely focused on the attachment style of clients, with a lack of research on the impact of the attachment style of the clinician (Daniel, 2006). As the therapeutic process involves a collaborative relationship between patient and clinician, the attachment patterns the clinician brings to the relationship will also have an impact (Smith *et al.*, 2010). Solely focusing on patient attachment styles is likely to produce inaccurate results and misinterpretations. Therefore, the interaction of the patient and clinician attachment styles should also be explored to help understand how the interaction-attachment patterns impact on the therapeutic process. Current research has been very limited, and in the systematic review by Smith *et al.*, (2010), it was recommended that further research should be conducted on the influence of the therapist attachment styles in addition to those of patients.

Aim of current review

As previous research reviews in the field of attachment and psychological therapy have predominantly focused on patient attachment patterns, this review aims to incorporate research on clinician attachment. Given the potential developments that could emerge from understanding this interaction process, a review of the current research could significantly

contribute to existing findings from research on patient attachment. The aim of this review is, therefore, to identify and examine the existing research where both patient and clinician attachment are measured to explore how the interaction of patient and clinician attachment influences the psychological process.

Focusing on the interpersonal dynamics of the whole psychological process, the review aims to examine the influence of attachment on engagement, therapeutic decision-making, behaviour and evaluation, in addition to the development of the therapeutic relationship and alliance. Through the synthesis of this research, the intention is therefore to provide a more comprehensive review of clinical attachment research that incorporates the interactive dynamic of both patient and clinician attachment styles, and allow for an improved understanding of its relevance in psychological therapies.

1.3 Method

1.3.1 The Search Process

Preliminary search:

The Cochrane Database of Abstracts of Reviews of Effects (DARE) was initially searched to confirm that a recent review on this topic had not been carried out, using the term ‘attachment’. Two reviews that were related to this area were identified; Smith et.al (2010) and Diener& Monroe (2011) although both of these reviews only examined the contribution of patient attachment to the therapeutic alliance.

Search Strategies:

A literature search was therefore conducted in March 2012, using the following databases; CINAHL (1990-2012); EMBASE (1990-2012); Medline (1990-2012) and PsycINFO (1990-2012). The search terminology used was: attachment AND OR ‘professional-patient relations’ OR ‘professional-client relations’ OR ‘therapist-patient’ OR ‘engagement’ ‘psychotherapeutic processes’ OR ‘therapeutic processes’ OR ‘therapeutic alliance’ OR ‘working alliance’ OR ‘helping alliance’ OR ‘transference’ OR ‘countertransference’.

A total of 1528 publications were initially identified using the above search strategy (252 from CINAHL, 347 from EMBASE, 341 from Medline and 588 from PsycINFO).

Following the removal of duplications, 873 potentially relevant articles were therefore included for the screening process to identify all articles that met the inclusion criteria.

To be included in the review, articles had to meet the following *inclusion criteria*:

- i. published articles only (not book chapters or unpublished studies)
- ii. published in English language
- iii. articles had to be research studies relevant to the review aims
- iv. the study had to involve both patient and clinician participants (or some representation of a dyad relationship)
- v. a measure of attachment was used for both patients and clinicians (either through self-report or standardised interview)
- vi. the study investigated attachment in relation to psychological therapy processes (this could include any measurable aspect of the therapeutic process, including engagement, therapeutic alliance, treatment decisions and reactions, countertransference)
- vii. studies investigating group interventions were excluded (only studies investigating one-to-one individual based therapy were included)

Exclusion criteria: Articles that measured either patient or clinician attachment styles only were not included for review.

This search process therefore involved screening the titles and manually reviewing the abstracts (where required). This led to the identification of 34 potentially suitable articles, which were then retrieved for full review. To complete the search process, a manual search through the reference lists of the relevant review articles identified two further articles for screening. These 36 articles were therefore collated and reviewed in detail in relation to the inclusion/exclusion criteria and the aims of the review.

From the remaining 36 articles, 25 of them were considered unsuitable on the basis of the following exclusion criteria; 17 articles included a measure of patient attachment only, 7 articles included a measure of therapist attachment only, and 1 article did not include a psychological therapy process measure. Eleven articles were therefore identified as meeting all criteria for the final review reported in this paper. (*Figure 1.1* illustrates this search process)

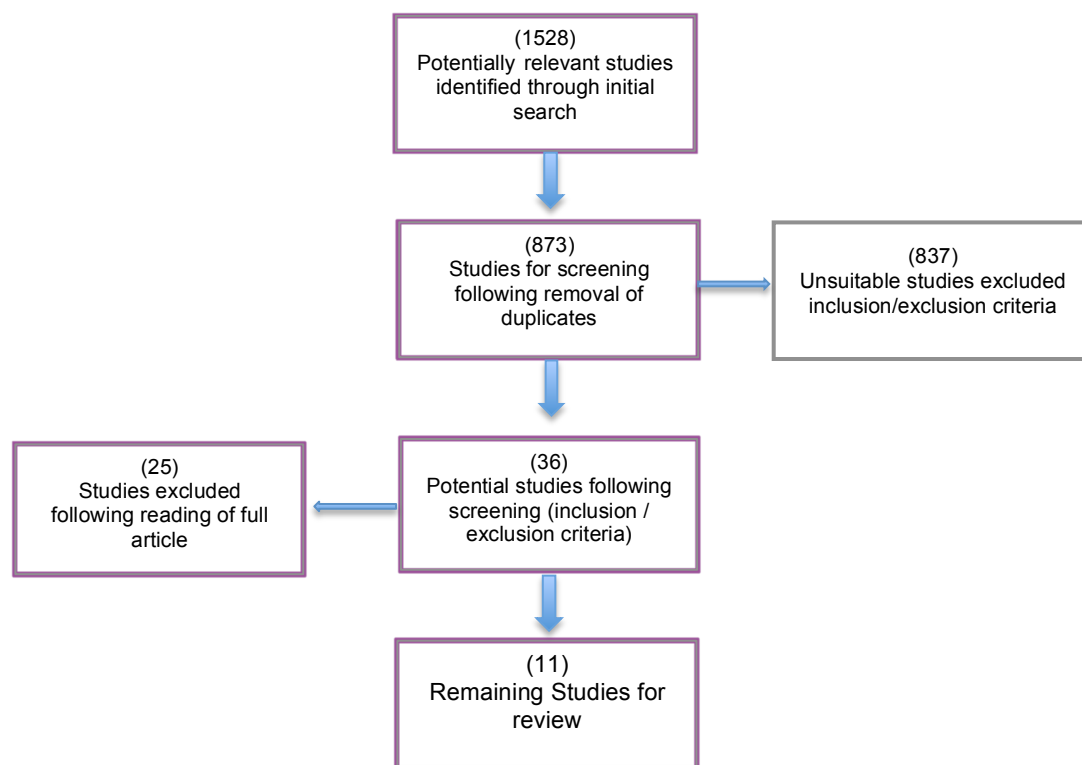


Figure 1.1 Flow chart diagram of the systematic review search process

1.3.2 Critical Appraisal

Given the limited number of research articles identified, quality control was not used to exclude any of the articles. However, the quality of the studies was required to be assessed. As the majority of the articles were non-experimental research, consideration was made to utilise an appropriate assessment method. Given the limited field of research and the type of the studies being reviewed, standard critical appraisal tools designed for clinical interventions and randomised control trials (RCTs) were considered less suited for this paper. A more tailored method was therefore adopted that allowed a systematic approach to be combined with an individual examination of the methodological aspects of each study (Pettigrew & Roberts, 2006). Scottish Intercollegiate Guidance Network (SIGN) and The Centre for Reviews and Dissemination (CRD) guidelines were consulted to assist with this process. The key aspects of quality criteria assessment, such as choice of measures, statistical issues, the risk of bias and external validity, as outlined by CRD (2008), were considered in relation to relevance and applicability to the studies in the review.

With the majority of the studies having an observational design, STROBE (Strengthening the Reporting of OBservational studies in Epidemiology) guidelines were also consulted in the process of critically reviewing the methodological issues. Although these guidelines were developed for reporting observational research (van Elm *et al.*, 2008), they provide checklist guidance that can be utilised in the absence of a standardised tool. This was used (along with CRD guidelines) to determine the range of quality criteria that would allow for a pragmatic and meaningful review of the identified studies. Eight quality criteria were assessed on a tailored three-point classification system developed in accordance with SIGN recommendations, where 2 = *well covered*, 1 = *adequately addressed*, and 0 = *poorly addressed, not addressed, not reported or not applicable*. A copy of this critical appraisal checklist can be found in the appendices (Appendix 1).

To increase the validity and reliability of this process, quality appraisal ratings of six of the eleven papers were second rated by a consultant clinical psychologist and a trainee clinical psychologist, both involved with the research. Similar ratings were given towards all six articles, with two articles being awarded identical scoring. One article differed on 1 point only, two articles differed on 2 points and one article differed on 3 points. The items where differences emerged were re-reviewed, discussed and amended appropriately.

1.4 Results

1.4.1 Overview of reviewed studies

Out of the eleven studies included in the review, six were conducted in naturalistic clinical settings, with the other five being carried out in university settings with student volunteer clients or vignettes/recordings of clients. The sample size of the studies varied considerably. The mean number of patient participants was 40.63 (SD = 27.71; range 3 – 93) and the mean number of clinician participants was 44.0 (SD = 33.09; range 13 - 121).

All of the studies attempted to explore the interaction of attachment styles of both patients and clinicians, although a mixture of methods and measures was adopted for this process. Measurement of attachment varied with three studies using the adult attachment interview (AAI; George, Kaplan & Main, 1985) for both patient and clinician attachment styles. Five

studies used a standardised self-report measure of attachment for both patient and clinician, and one study used different self-report measures for patient and therapist. A further two studies attempted to explore the interaction of attachment styles through the use of video and tape recordings of patients to represent different attachment categories.

Perhaps one of the largest variations across the studies was the nature and length of the interaction between patient and clinician. For the majority of articles the interaction was short term (1-15 sessions) counselling/therapy, although for two of the articles reviewed the relationship between patient and clinical case manager was over six months, with regular interactions and contact throughout this time. In the studies that used simulated patients (through video and tape recordings), the duration of the 'interaction' was as short as three minutes.

In terms of statistical analysis, the majority of studies used correlation and regression analysis to explore the relationship between attachment and the psychological process. An overview of the characteristics and key findings of the reviewed studies is provided in *Table 1.1*, where the articles are presented in chronological order.

In terms of assessing the influence of attachment and attachment interaction on psychological therapy, a range of interpersonal therapeutic processes were examined in the review papers. These included the clinician's responses and therapeutic decisions, the depth and smoothness of the intervention, therapeutic/working alliance, countertransference, session evaluation and patient wellbeing/functioning. The majority of the articles covered a number of these variables within the same research paper. Therefore, to allow for a more cohesive review, these processes were grouped into two themes based on the author's focus on the interpersonal aspects of the therapeutic process. The first theme was categorised as therapeutic reactions and responses, which included clinician responses, treatment decisions, expectations and countertransference. This also included an additional sub-theme that focused on evaluations of session depth and smoothness. The second theme explored the therapeutic relationship and the development of a working alliance.

Table 1.1: Overview of studies exploring the interaction of patient and clinician attachment styles

Author (ordered by date) & Country	Design	Patient Population	Clinicians	Treatment Setting	Measure of Attachment	Type (& duration) of Interaction	Psychological Intervention
Dozier et al., (1994) USA	Cohort study (part of larger RCT)	27 psychiatric patients	18 case managers	Community based clinical setting	AAI	Psychological & practical support (6months +)	Respectful interaction
Tyrell et al., (1999) USA	Prospective cohort study	54 psychiatric patients	21 case managers	Community based clinical setting	AAI	Psychological & practical support (6months +)	Therapeutic alliance, Patient being
Rubino et al., (2000) UK	Analogue Cross sectional	4 vignettes (role-play)	77 psychology graduates	Non clinical (university)	RSQ (self-report)	Short video clip (approx. 3 minutes) of potential rupture to therapy	Respectful dependency
Sauer et al., (2004) USA	Prospective cohort study	17 psychology outpatients	13 graduate level therapists	University & community counselling centre	AAI (self report version)	Min 7 sessions therapy (CBT(n=5), dynamic(n=4), eclectic(n=5) systemic(n=3)	Working attachment
Mohr et al., (2005) USA	Cross sectional	93 volunteer clients	27 graduate level counsellors	University counselling centre	ECRS (self report)	Person-centred counselling (1 session lasting 30-45 minutes)	Counselling Session (sm)
Bruck et al., (2006) USA	Prospective cohort study	46 psychiatric outpatients	46 qualified therapists	Psychiatric outpatient service	RSQ (self-report)	Manualised dynamic therapy & CBT (max of 30 sessions)	Working Session (sm)
Martin et al., (2007) Germany	Analogue Cross sectional	AAI clips of 3 female patient interviews	121 medical students & 52 trainee psychologists	Non clinical (University)	RQ (self report) & patient clips from AAI	Listened to clips of AAI (lasting 4-7 minutes)	Respectful communication, reaction, therapist
Fuertes et al., (2007) USA	Prospective cohort study	59 psychotherapy outpatients	59 qualified therapists	Out-patient clinics & private practice	ECRS (self-report) & CATS (client only)	Therapy (various orientations incl. CBT & dynamic) Min = 5 sessions	Working attachment 'real'
Romano et al., (2008) Canada	Prospective cohort study	59 volunteer clients	59 trainee counsellors	University & community counselling centre	ECRS (self-report) & CATS (client only)	15 sessions of eclectic & integrative therapy (data taken from mid sessions 5-9)	Working attachment Dependency evaluation
Romano et al., (2009) Canada	Prospective cohort study	26 volunteer clients	24 trainee therapists	University counselling centre	ECRS (self-report)	Short term counselling (data taken from	Evaluation & type

							early 1-3 sessions)
Petrowski et al., (2011)	Prospective cohort study	59 psychiatric patients (anxiety disorders)	19 psycho-therapists	Psychiatric hospital setting	AAI	Psychotherapy (2 main therapies; psychodynamic & CBT) Mean length = 69 days	Thei

* AAI (Adult Attachment Interview); CATS (Client Attachment to Therapist Scale); ECRS (Experience of Close Relationships Scale); RQ (Relationship Questionnaire); RSQ (Relationship Scales Questionnaire)

1.4.2 Definitions

To avoid confusion within this review, it is perhaps helpful to first provide some clarification of the interchangeable terms used within attachment theory research. First of all *attachment* itself is often referred to as '*attachment patterns*' or '*attachment styles*' and in some papers referred to as '*attachment states of mind*' (Tyrell *et al.*, 1999). At present, most researchers use a two-dimensional model of attachment, with *anxiety* and *avoidance* as the two-dimensions. This is illustrated in Figure 1.2.

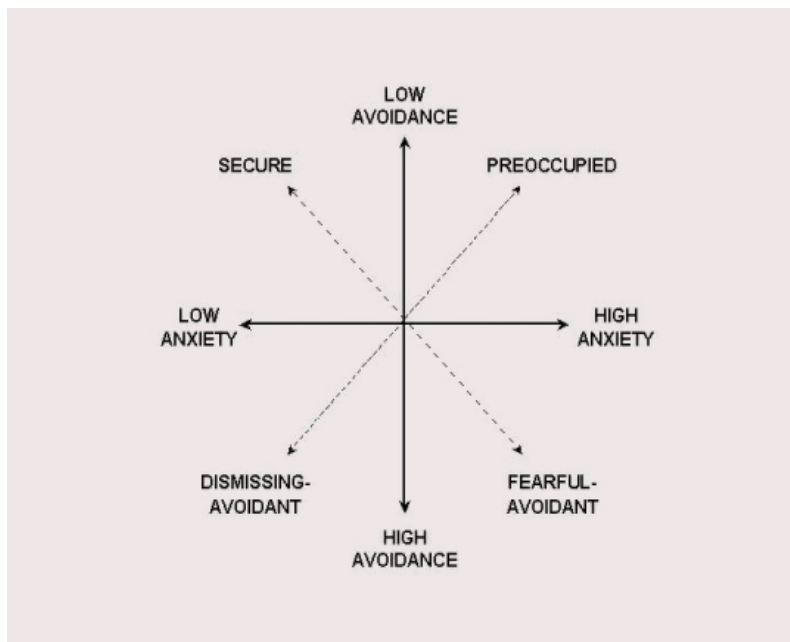


Figure 1.2. The two-dimensional attachment model (Bartholomew, 1990)

Secure attachment is therefore associated with low avoidance and anxiety, and *fearful attachment* is associated with high avoidance and anxiety. These two categories form the poles of a continuum explaining overall attachment security / insecurity. The other attachment continuum is formed by *dismissing attachment* (low anxiety and high avoidance) and *preoccupied attachment* (high anxiety and low avoidance). As fearful, preoccupied and dismissing attachment all represent high anxiety and/or avoidance, they are all considered to be patterns of insecure attachment (Mohr *et al.*, 2005).

Two further terms are often used to describe individual attachment; *hyperactivating* and *deactivating*. Preoccupied individuals are thought to hyperactivate their attachment system in times of distress or perceived threat, in contrast to dismissing individuals who are likely to

deactivate theirs (Mikulincer & Shaver, 2007). These terms are therefore used interchangeably. ‘*Dismissing*’ and ‘*deactivating*’ are often referred to when describing avoidant attachment. Similarly, ‘*preoccupied*’ and ‘*hyperactivating*’ are frequently used in relation to anxious attachment.

1.4.3 Quality ratings

The critical appraisal ratings for each of the articles are shown in *Table 1.2*. The diverse nature of the studies, in terms of design, measure of attachment and the psychological processes variables explored, limited the feasibility of direct comparisons. However, *Table 1.2* provides some guidance to the quality of each of the studies and indicates the methodological strengths and weaknesses. These issues and further details of the papers are discussed below, as the papers are reviewed under the headings outlined above. (The articles are reviewed in chronological order).

Table 1.2: *Critical appraisal of reviewed articles*

Quality criteria Study	Aims & Hypotheses	Setting	Patient Sample	Clinician Sample	Measure of Attachment	Measures of process variables	Power / Analysis	External validity	Overall rating (max = 16)
1. Dozier (2004)	2	2	2	1	2	0	0	1	11
2. Tyrell (1999)	2	2	2	2	2	2	0	1	13
3. Rubino (2000)	2	0	0	0	1	1	1	0	5
4. Sauer (2003)	2	2	2	1	1	2	0	0	10
5. Mohr (2005)	2	1	1	1	2	1	1	1	10
6. Bruck (2006)	2	2	2	2	2	2	0	1	13
7. Martin (2007)	2	0	0	2	1	1	0	1	7
8. Fuertes (2008)	2	2	2	2	1	2	0	1	12
9. Romano (2008)	2	1	1	1	2	1	0	1	9
10. Romano (2009)	2	0	1	2	2	2	1	1	11
11. Petrowski (2011)	2	2	2	2	2	2	0	1	13

1.4.4 Attachment and therapeutic reactions & responses

Dozier *et al.*, (1994) is the first article to explore the interaction of the attachment states of both patients and clinical case managers. In this study, attachment was measured by the AAI and case managers' responses to patients were recorded and rated on the extent to which they intervened and responded to their patients. Through hierarchical regression analysis, interaction effects of attachment styles were found. Secure case managers were found to be more able to attend to the patient's underlying needs, compared to insecure case managers who were more likely to attend to his/her dependency needs.

Secure case managers were also found to respond in a similar manner to both preoccupied and dismissing patients, whereas insecure case managers responded in greater depth with preoccupied patients than dismissing patients. From their findings the authors concluded that security of case managers appeared to have an important influence towards their ability to respond therapeutically to the individual needs of patients.

When interpreting these findings, it is important to consider the relatively small sample size (twenty-seven patients and eighteen clinical case managers). The authors acknowledge this as a limitation in their analysis, but power calculations and effect sizes are not formally addressed. The ratings of case managers responses are also coded through a rating system developed for the purpose of the research, and no standardised measures were used.

Although inter-rater reliability was tested on a subset of interviews, the validity of the measurement had not been demonstrated and may not truly capture the depth of the response during the intervention process.

In addition to these methodological issues, the role of clinical case managers should also be considered both in terms of their level of training and the nature of their clinical work. As their roles involve helping with practical issues as well as psychological issues, their interactions and relationships with patients is less typical of usual psychological therapy. This could reduce the generalizability of the findings to more standard therapy settings.

Developing on the initial findings from Dozier *et al.*, (1994), a study carried out by Rubino *et al.*, (2000) explored how attachment styles influence therapist's responses when faced with a hypothetical therapeutic scenario. However, a major limitation of this study was the analogue design, using four video vignettes to represent each of four different patient

attachment styles: secure, dismissing, preoccupied and fearful. These vignettes were played to therapists who had to explain how they would respond to the ending statement, which was potentially challenging to the therapeutic relationship. Therapist's responses were recorded and independently double-rated on a response empathy scale (developed by researchers) and Depth of Interpretation Scale (Harway *et al.*, 1953) was also used. Analysis of variance (ANOVA) found significant main effect and interaction effects in relation to patient and therapist attachment anxiety, with more anxious therapists responding less empathically and not varying their level of empathy compared to less anxious therapists. In relation to depth of response, therapists in general were found to give deeper responses to fearful patients than to secure or dismissing patients.

When contemplating these results, however, it is important to consider the design of the study, and whether role-played patient videotapes can be compared to psychological therapy delivered within clinical settings. The authors did attempt to simulate a direct experience of 'being with the patient' through close up images of the patient's face. However, it remains questionable whether this could have activated therapists' attachment systems in the same way as real interpersonal interactions and relationships with patients. As the therapists in this study were all graduate psychology students, their lack of experience could also have influenced their responses to patient dilemmas and potential ruptures. Lack of empathy could, therefore, be related to inexperience rather than attachment styles.

Martin *et al.*, (2007) carried out a similar designed study that explored the countertransference responses of medical students and trainee psychologists towards a tape-recording of part of an AAI with a patient describing their mother and father. The interviews represented three attachment styles: autonomous/secure, dismissive and preoccupied/enmeshed, and the listeners had to describe their reactions to each of the clips. In line with the study's first hypothesis, the autonomous patient was rated friendlier, less hostile, and had a more positive impact on the listener's wellbeing in comparison to the insecure patient clips. However, no differences were found between reactions in relation to the listener's (therapist) attachment organisation, indicating no interaction effects.

The study also attempted to explore whether psychotherapeutic training would improve clinicians' heightened awareness to interpersonal issues and influence responses, comparing the responses between medical students to that of trainee psychologists. The methodological design was somewhat questionable, however, as medical students would also have been

likely to receive some training and experience in interpersonal interactions with patients, and are perhaps a less useful comparison group to explore this issue. The lack of significant differences found between the medical students and trainee psychologist's reactions could therefore be related to similarities between groups rather than a non-significant training effect.

The second part of this study explored the trainee psychologist's expectations and therapeutic decisions in relation to the three patient interviews. Eighty-five per cent of therapists expected a positive working relationship with the autonomous patient, compared to 50 per cent for the preoccupied patient and only 35 per cent for the dismissing patient. There were also significant findings in relation to the treatment focus, strategies and recommendations, in line with hypotheses that insecure patients would be considered to be more challenging to work with. In addition to this, significant differences between patient attachment styles and hypothetical decisions on being accepted or rejected for psychotherapeutic treatment were reported, with preoccupied patients most likely to be accepted for treatment.

The major limitation of this study was again the analogue design and the absence of 'real' therapy. The results were therefore based on therapists' expectations and predictions of therapy, rather than real therapeutic responses. The interview clips used were also very short (average five minutes), limiting the experience of 'being with the patient' further. However, the significant results strengthen the assumption that listening to patients with different attachment patterns provokes specific responses, expectations and predictions from therapists with varying attachment patterns, including secure. This is important to be considered in early countertransference reactions and throughout the therapeutic process.

Mohr *et al*, (2005) explored attachment as a predictor of countertransference behaviour in the first counselling session. Countertransference was rated through live observations of the sessions by clinical supervisors on the Countertransference Behaviour Measure (CBM), a measure developed by the authors based on the Inventory of Countertransference Behaviour (ICB; Friedman & Gelso, 2000). The methodology of this study is therefore strengthened from having sessions independently observed and rated by a qualified clinical supervisor. In relation to countertransference behaviour, significant interaction effects were found between dismissive clients and fearful therapists, and dismissive clients and dismissive therapists, with both sets of dyads being rated higher on 'distant' countertransference behaviour.

'Hostile' countertransference behaviour was also predicted by dismissive therapist attachment alone and by the interaction of dismissive therapists and clients. These findings present further support for both patient and therapist attachment styles influencing therapeutic reactions and responses, with certain combinations creating more hostile and distant interpersonal environments. The clinicians in this study, however, were trainee counsellors and it is possible, therefore, that less positive countertransference experiences could have been confounded by therapist inexperience, which the authors acknowledge.

A further study that explored how patient and clinician attachment styles influence therapeutic reactions and behaviour was carried out by (Romano, *et al.*, 2009). They investigated the ways in which therapists intervened with clients in early therapy sessions. Sessions were videotaped and the researchers rated interventions as either directive, supportive, or interpretative on the Psychodynamic Intervention Rating Scale (PIRS; Cooper & Bond, 1996). No significant main effects between therapist attachment or patient attachment and the type of intervention were reported. An interaction effect, where higher therapist avoidance together with higher client avoidance predicted a higher frequency of therapist directive interventions in early therapy, was reported. No significant results in relation to supportive and interpretative interventions were found, although these types of interventions were generally low in frequency.

The lack of significant findings could be related to a number of methodological issues. The sample size was small (24 trainee therapists and 26 volunteer clients), and therefore the hierarchical linear regression analysis was severely underpowered, given the use of eight predictor variables. As a general guideline, the minimum sample size for regression analyses is $50+8k$ (where k is the number of predictor variables), as recommended by Green (1991). Although the authors report adopting family-wise error rates of .10 to control for Type II errors, the sample size was considerably short of power.

Further limitations to this study involve the use of trainee therapists and student volunteers, which is common in this area of research. The authors therefore discussed the lack of supportive and interpretative interventions in relation to inexperience, with very few trainees attempting interpretative interactions with clients. The number of interpretative interventions may also be less likely to occur in the early sessions, in contrast to middle-late sessions of a psychological intervention, questioning the selection of early session data. Furthermore, volunteer students are also less representative of clinical populations and it is

possible their 'target problems' were perceived to require less supportive interventions. This study therefore provides modest support that therapist and client attachment orientations can influence the nature of intervention during the early stages of therapy.

Session depth & smoothness

In relation to therapeutic process, several of the reviewed studies also explore the smoothness and depth of the therapy sessions. '*Smoothness*' refers to the emotional atmosphere of a session, and the degree it is perceived to be comfortable and pleasant, whereas the *depth* of a session relates to the level it is perceived to be deep and valuable (Reynolds et al., 1996).

Mohr *et al.*, (2005) explored both clients (volunteer undergraduate students) and therapists (trainee counsellors) ratings of sessions on smoothness and depth, measured on the Session Evaluation Questionnaire (SEQ, Stiles & Snow, 1984). Client attachment insecurity was inversely related to smoothness of sessions but therapist attachment styles did not moderate this. In particular, client fearful attachment was found to reduce smoothness of session, as rated by both therapists and clients. This was also the only predictor for depth of session.

Given that fearful attachment styles are considered to be present in the most insecure individuals, it is understandable session smoothness and depth could be reduced through interpersonal difficulties. However methodological limitations through the combination of inexperienced therapists, volunteer clients, and first session data only, reduce the generalisability of the results. Despite such methodological weaknesses, the study improves on role-play and tape recordings through the live observations of therapy sessions.

Similar findings were also reported in a study carried out by Bruck *et al.*, (2006) which explored attachment styles (and personality factors) in relation to a number of process and outcome variables. In line with their hypotheses, significant findings were reported on lower session depth and smoothness (as measured on the SEQ) in relation to insecure attachment styles of both patients and therapists.

Romano *et al.*, (2008) also investigated a wide range of therapeutic variables in relation to both global attachment, which has been the attachment measure across the reviewed studies

and specific attachment to therapist, measured on the Client Attachment to Therapist Scale (CATS; Mallinckrodt *et al.*, 1995). With regard to session evaluation, the depth subscale of the SEQ was analysed, and clients who were more securely attached to their therapist rated greater session depth during the middle sessions. Global attachment was also related to session depth, with negative associations between client avoidance and session depth. An interaction effect of client attachment anxiety and counsellor attachment avoidance was also predictive of lower session depth.

The use of middle session data was acknowledged in interpreting the findings, as attachment to therapist is likely to have been formed by that point. The smoothness subscale of the SEQ was also excluded to limit the criterion variables, as the sample size restricted the power of the regression analysis.

1.4.5 Attachment and therapeutic alliance

The first study in the review to explore the interaction of attachment and therapeutic relationships, was carried out by Tyrrell *et al.*, (1999), which reported that dissimilar attachment ‘states of mind’ between clients and clinical case managers were the most effective combinations. This was in line with their hypotheses, based on the idea that case managers with different attachment styles would be more likely to challenge clients’ ways of relating and processing emotions. Using an extended analysis of the AAI, developed by Kobak (1989), the deactivating (dismissing/avoidant) and hyper-activating (preoccupied/anxious) dimension was used to test the hypotheses. This was due to the autonomous dimension violating the assumptions of normality, and was therefore excluded from the regression analyses. Z-score transformations were also used in the regressions, and the effect size for the hierarchical multiple regression was calculated as Cohen’s $f^2 = 0.18$.

The analysis showed that case managers who had less deactivating attachment styles formed stronger alliances with clients who were more deactivating. In contrast, case managers who had more deactivating styles formed stronger alliances with clients who were less deactivating. It should be noted that alliance was only measured by clients on the Working Alliance Inventory (WAI; Hovarth & Greenberg, 1989), although case managers did report on overall functioning of the clients, which was positively related to working alliance and

client's self report on general life satisfaction. An important aspect to this study was the length of time case managers had been working with clients. Similar to the Dozier *et al.*, (1994) study, these working relationships had been well established, ranging from seven to sixty-nine months. Given the limited research on this area, it is unclear how attachment issues are influenced by the longevity of the clinician-patient relationship.

One paper by (Sauer *et al.*, 2003), however, does attempt to explore the temporal relationship between client and therapist attachment orientations and working alliance. This was tested by the completion of the WAI by both the therapist and the client after the first, fourth and seventh session. Although the patient sample size was small (n=17), the study was conducted within a clinical setting and treatment-as-usual increased the naturalistic aspect. Average working alliance ratings by both therapists and clients increased across the three time points, consistent with the hypothesis that alliance is strengthened over time. Interestingly, higher therapist attachment anxiety was related to more positive client reported working alliance at the first appointments. However, therapist attachment anxiety had a significantly negative effect on client working alliance ratings over time.

The unexpected finding at the first appointment was considered in relation to anxious therapists being able to initially connect with clients, perhaps when they are feeling more anxious themselves during the first sessions. However, this anxiety appears to be less helpful in further sessions. No main client attachment effects were found in relation to working alliance at any of the time points. Little information is provided on the client participants; therefore, other confounding factors, such as presenting problems and severity of difficulties, along with small sample size, may have influenced the lack of significant results. The self-report measure of attachment used (the Adult Attachment Inventory; Simpson, 1990) was also a less utilised measure, which only demonstrated marginal reliability in the reported study.

Exploring the development of relationships in psychotherapy, Fuertes *et al.*, (2007) examined the role of patient and therapist attachment in the formation of the 'real relationship'. With considerable overlap between working alliance and the real relationship, the latter is defined as a more complete and personal relationship in which the working alliance may only be part of (Gelso *et al.*, 2005). The study has certain methodological strengths, with a moderate sample size of 59 therapist-client dyads in routine therapy. The measures used were also standardised measures; including the ECRS (global attachment

measure) and CATS (client attachment to therapist), and dependent relationship variables measured on the WAI and The Real Relationship Inventory (RRI; Kelley *et al.*, 2004), both client & therapist versions.

In line with the hypothesis, there was an inverse association between real relationship ratings and both therapist and client attachment avoidance. Therapist attachment avoidance was also associated with reduced ratings of progress by the client, linking the weaker relationship to poorer outcomes. However, the interaction effects in this study are weakened through the measure of patient attachment to therapist. This provides a specific attachment, rather than a global measure, which could confound the results of this study.

The recent paper by Petrowski *et al.*, (2011) also reported significant effects of patient and therapist attachment interactions on the therapeutic relationship. Neither patient nor therapist's attachment alone influenced therapeutic alliance, although insecure patients (either dismissing or preoccupied) evaluated the therapeutic relationship more satisfying when working with a therapist with a dismissing attachment style. This study was the only one reviewed that used a homogeneous inpatient sample, with all patients suffering from anxiety disorders. Also, the Helping Alliance Questionnaire (HAQ; Bassler *et al.*, 1995) was administered at the point of discharge, in comparison to the majority of studies that focused on early alliance. Despite these differences in design, contrary attachment representations were again associated with stronger alliance in therapeutic dyads.

In addition, two articles reviewed in the first section also investigated attachment interactions and the therapeutic alliance. Bruck *et al.*, (2006) also reported that dyads with dissimilar attachment styles were associated with more positive working alliance ratings and better therapeutic outcomes. They highlight this dissimilarity was based on therapists having greater attachment security compared to patients, with securely attached therapists generally associated with more favourable in-session processes. The analysis of this study was limited to correlations, however, which therefore limits the understanding of the nature of the relationships and the interaction between the different variables.

Romano *et al.*, (2008) also explored attachment and therapeutic alliance in addition to the other process variables discussed under the first heading. The study was limited through methodological weaknesses including a lack of statistical power and the use of volunteer clients and no significant findings were reported.

1.5 Discussion

1.5.1 Synthesis of findings

The results of this systematic review offer some tentative suggestions as to how the interaction of patient and clinician attachment styles can influence psychological processes and the development of the therapeutic relationship. The current literature explores this through a number of different process variables in relation to patient and clinician's responses, experiences and behaviours during psychological therapy. In particular, therapist's reactions and decisions about therapy, the smoothness and depth of sessions, and the therapeutic alliance were the main areas of focus.

In relation to therapeutic responses and reactions, the level of empathic responses (Rubino *et al.*, 2000) and responding to patients underlying needs (Dozier *et al.*, 1994) were positively related to clinician's secure attachment. This suggests the ability to empathise with patients and not to react to their dependency demands may therefore be compromised by clinician's own attachment insecurities. Anxious clinicians may therefore be less effective at providing the most suitable responses and interventions. This links to the focus within psychological treatment, which was also influenced by attachment styles. Greater anxiety related to a focus on specific symptoms and problems (Martin *et al.*, 2007) and more directive interventions were predicted by avoidant attachment (Romano *et al.*, 2009).

Two of the papers that explored this area (Rubino *et al.*, 2000; Martine *et al.*, 2007) used analogue designs and hypothetical therapeutic scenarios. Given the absence of a 'real' patient, it is questionable whether therapist's attachment behaviours were activated. The research by Dozier *et al.*, (1994) and Romano *et al.*, (2009) is somewhat more robust, however, and would suggest attachment styles do influence therapeutic responses.

With regard to attachment and countertransference, two articles explored how different dyadic pairings activate certain attachment behaviours, and lead to the experience of different emotions. Insecure attachment styles were related to distant and hostile countertransference behaviour during therapy sessions (Mohr *et al.*, 2005) and also created more negative reactions and impulses (Martin *et al.*, 2007).

In relation to therapy session evaluations, perhaps not surprisingly, secure attachment styles of both patients and clinicians were associated with greater depth and smooth therapy sessions (Romano *et al.*, 2008; Bruck *et al.*, 2006; and Mohr *et al.*, 2005). From the studies that explored this, only one reported no moderating or interaction effect of the clinician attachment style (Mohr *et al.*, 2005). The consistency of these findings, from the more robust articles in the review would indicate that smoothness and depth of sessions are positively associated with secure attachment patterns.

The other main theme of this research examines the interaction of patient and clinician attachment and the therapeutic alliance. Six of the reviewed studies explored this and it emerged that more effective therapeutic relationships were associated with contrasting attachment styles between patient and clinician (Petrowski *et al.*, 2011; Bruck *et al.*, 2006; Sauer *et al.*, 2003 and; Tyrell *et al.*, 1999). Similar to the findings on providing appropriate and empathic responses, clinicians higher on attachment anxiety and avoidance were less effective at forming a working alliance (Fuertes *et al.*, 2007; Sauer *et al.*, 2003).

There was also a suggestion that attachment anxiety and similarity in attachment styles at the start of psychological treatment may have a positive influence on engagement and therapeutic alliance (Bruck *et al.*, 2006 and; Sauer *et al.*, 2003). It is possible that anxious therapists may put greater emphasis on making patients like them and connect with them, due to their own attachment needs, producing a superficially strong alliance at the start of treatment. However, this is unlikely to be sustained and considered to be less helpful as the intervention develops.

Within this review, the research on attachment and therapeutic alliance was generally more robust than the studies investigating the processes within therapy. This may be related to complicated idiosyncratic issues surrounding the process of therapy, making it less specific and harder to measure. In relation to therapeutic alliance, however, it appears attachment security is positively associated with its development. Where more insecure attachments are present, there is evidence to suggest the interaction of contrasting styles is a more effective combination.

1.5.2 Methodological issues and limitations of the review:

The methodological weaknesses that have been identified in this review highlight the lack of robust research in this area, where both therapist and patient attachment styles are explored. As the articles reviewed were observational studies, these are generally considered to be more susceptible to biases and have reduced validity and reliability in comparison to controlled studies. Publication bias must also be considered in the review, as studies with insignificant or weaker findings are less likely to be published (Petticrew & Roberts, 2006).

However, the limitations of the articles reviewed can be understood within the context of attachment theory and clinical work, which is recognised as a complex and challenging area to investigate (Obegi & Berant, 2009). Although most clinicians would acknowledge the significant role interpersonal factors, such as attachment styles, could have on psychological therapy (Norcross, 2002), these idiosyncratic aspects are often difficult to conceptualise and measure within empirical research.

The use of university settings, trainee/student therapists and volunteer student patient sample groups imposes some limitations on the external validity of the studies and on our ability to draw more comprehensive conclusions. Given two articles were analogue studies, and another four studies used volunteer clients and trainee therapists, the generalisability of the findings from these studies to clinical populations is significantly reduced. Further weaknesses surround the size of the studies, with the majority of them failing to achieve statistical power in their analysis. Due to the limited research in this area, effect sizes have perhaps been over-estimated, leading to insufficient sample sizes to fully test hypotheses. The two largest studies in this review are also the two analogue studies with the most limitations in terms of design and generalisability. This demonstrates the research compromise between quality and quantity that is most evident across the studies in this review.

Another major methodological issue that dominates this research topic is the measure of attachment. Two main methods have been developed: (i) the Adult Attachment Interview (AAI) devised by George, Kaplan & Main (1996) within the developmental psychology field and (ii) self-report questionnaires developed from social psychology research. Both of these methods have been utilised within attachment research, although there is a continual debate

over the strengths and weaknesses of each approach, and whether in fact they are measures of different concepts.

The AAI assess attachment *states of mind*, which are considered to function at the subconscious level. The coding process of the interview is therefore based on both ‘how and what’ an individual says when describing his childhood (Hesse, 1999). Depending on the responses given, individuals are then categorised as *autonomous*, *dismissing*, *preoccupied* or *unresolved/disorganised*. This approach contrasts with the self-report measures, which are assumed to relate to current attachment relationships that individuals are consciously aware of and can accurately report in a questionnaire. There are a number of different self-report questionnaires that have been developed and improved, with the two more common measures being the Relationship Scale Questionnaire (RSQ; Griffin & Bartholomew, 1994) and the Experience of Close Relationship Scale (ECRS; Brennan, Clark & Shaver, 1998). Both of these measures allow for a dimensional conceptualisation of attachment on *Attachment* and *Avoidance* dimensions, rather than discrete categories, which is a development on which self-report researchers appear to have converged more recently (Daniel, 2006).

Despite the continual debate on the ‘best’ way to measure attachment, there appears to be value in both approaches, with interesting research emerging from both types of measures. As the AAI is relatively time consuming and requires trained researchers to administer, self-report measures are more frequently used in research. This is represented in this review, with only three studies using the AAI. However, the mixed method of attachment measurement complicates the review process, and limits the conclusions that can be drawn. This area of research would therefore benefit from a consensus on how attachment is measured, to allow for better comparisons within the literature.

1.5.3 Implications for research and clinical practice

The number of empirical research studies on attachment styles and psychological therapy is still relatively small, and even smaller are the number of investigations on both patient and clinician attachment styles (Levy *et al.*, 2011). This has limited this review and the findings that can be drawn. The tentative conclusions that have emerged, however, suggest that the interaction of attachment styles of both patients and clinicians influences the experience of a

psychological intervention. Overall, securely attached patients are likely to experience more positive interactions and develop stronger working alliances with their clinician.

This general finding also relates to attachment styles and outcomes, with a pattern emerging from previous research suggesting secure patients fare better than insecure patients in psychological therapy (Berant & Obegi, 2009). Given the strong link between working alliance and therapeutic outcomes (Martin *et al.*, 2000) it is likely that these findings are inter-related. However further research exploring therapeutic alliance as a mediating factor of attachment on treatment outcomes is required. Only one study, by Byrd *et al.*, (2010), was found to explore this process, which reported partial mediating effects of working alliance. A less examined but further interesting development is to investigate change in attachment styles as an outcome measure, with a few studies (McBride *et al.*, 2006; Diamond *et al.*, 1999) reporting increases in attachment security following a psychological intervention.

Given the higher probability of individuals with more insecure attachment styles presenting with psychological difficulties (Dozier *et al.*, 1999), then this review highlights the importance of improving our understanding as to what works best for these groups. Having a greater awareness of how attachment patterns may influence patient presentations and behaviour could help the clinician anticipate the potential problems individuals might have with engaging in therapy and the possible ruptures that could arise in the development of a therapeutic alliance. Such awareness of attachment issues within therapy could be developed through the use of clinical supervision and the encouragement of greater reflection on the attachment dynamics within the therapeutic process. This could be particularly helpful for less experienced clinicians who might misinterpret difficulties within the interpersonal interplay during the early stages of therapy.

The findings of this review also highlight the impact attachment styles can have throughout the therapeutic process. Training clinicians on attachment-informed practice could also be a useful development to increase awareness and understanding. Training in how to work with and adapt to different attachment styles could be particularly helpful when working with patients with insecure attachment styles who have difficulty engaging with services and forming relationships with others. This could lead to more satisfying and successful therapeutic experiences for both the patient and the clinician.

This review also highlights the role of the clinician's attachment, and increasing self-awareness of the clinician could also help to improve the therapeutic experience through understanding how they are likely to respond to certain situations and individuals. Clinicians who are aware of their own attachment patterns could use this knowledge to engage with patients and strengthen working alliance. For example, when working with patients who have more dismissive/avoidant attachment styles, clinicians may find more success responding with practical and cognitive interventions, in comparison to affective interventions (reflecting on feelings and empathy), which may be more suited to preoccupied/anxiously attached patients (Slade, 2008).

Responding in a manner that mirrors a patient's attachment style has been referred to as responding "in style" and findings from the literature reviewed would suggest this may be helpful in the earlier stages of therapy, with a gradual move to more challenging "out of style" attachment responses as the intervention progresses (Bernier & Dozier, 2002). Flexibility in the therapeutic approach is therefore considered to an important factor in engagement and the development of a working alliance, and the ability to adapt therapeutic styles and engage in flexible practice has been linked to greater attachment security of the therapist (Rubino *et al.*, 2000; Tyrell *et al.*, 1999; Dozier *et al.*, 1994).

However, the level of experience of the clinician is also likely to influence their ability to adapt their therapeutic approach appropriately to meet the needs of their patient (Daly & Mallinckrodt, 2008). Being able to draw on previous experiences of clinical work and their own awareness of interpersonal behavioural can help to build more successful working alliances. Thus both attachment security and experience of the clinician are likely to be important and influential factors throughout the therapeutic process. The limited literature in this field has mainly examined students and trainee counsellors and therapists, who are likely to have little clinical experience. More research on therapeutic dyads with qualified and experienced clinicians to allow comparisons between experienced and inexperienced clinicians groups would therefore be a useful development for future research.

The literature would also benefit from larger research studies on the dyadic interactions of attachment styles, to allow for firmer and more generalisable conclusions to be drawn. Despite the therapeutic relationship being compared and related to that of a care-giving attachment relationship, empirical research on how this can be understood and developed is considerably sparse. Given the continued problems in engaging with certain patient groups

and the high level of missed appointments and wasted clinical resources, efforts need to be directed towards improving this. Developing our understanding of the role of attachment in this process could therefore offer valuable insight and direction to improving services.

1.6 Conclusions

At present, attachment concepts and their influence on psychological therapies remain an interesting but relatively untested area. From the current limited literature, evidence suggests both patient and clinician attachment styles can play a significant role in shaping the experience and ultimately the success of a psychological intervention. Further research could therefore offer better understanding of the interpersonal dynamics that play out between the clinician and patient and lead to important developments towards improving services.

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2. Bridging Chapter

This chapter aims to bring together the relevant literature and outline the rationale for the study's research aims.

2.1. Attachment and mental health

Reviewing the current research on the clinical application of attachment theory has highlighted the relevance of attachment theory in relation to mental health problems and the provision and delivery of therapeutic services. Consistent with Bowlby's hypotheses that insecure attachment relationships can make a person more vulnerable to psychological problems, there is a growing body of research evidence to support this link (Davila & Levy, 2006). Connections with attachment constructs and depression, anxiety, eating disorders and personality pathology have all been reported (Barone, 2003; Cole-Detke & Kobak, 1996; Fonagy et al., 1996)

The literature would therefore suggest that insecure attachment styles might constitute a significant risk factor for developing mental health problems (Dozier *et al.*, 2008). However, quite remarkably, very little research has been carried out to explore attachment patterns and profiles within psychiatric populations (Cyranowski *et al.*, 2002). There is therefore a need to expand on the current research to improve understanding of the complicated links between attachment and psychological distress (Wei *et al.*, 2005). In light of this, the first aim of the reported study is, therefore, to explore this link further and investigate the relationship between attachment patterns and psychological distress.

2.2. Engagement with services

Although potentially leading to a greater need to access support and services, insecure attachment patterns have also been associated with reduced help-seeking behaviours (Vogel & Wei, 2005; DeFronzo *et al.*, 2001) This can be understood through the two-dimensional constructs of attachment -- anxiety and avoidance-- and the related internal working models for support seeking behaviour. Attachment avoidance (negative working model of others)

may deter an individual from accessing help as a result of a lowered understanding or awareness of the possible benefits and perceived helpfulness (Liotti, 2007). On the surface, at least, dismissive individuals appear to have little problem with self-esteem, but have difficulty in relying on others. Avoidant individuals are reluctant to experience emotions that might encourage them to connect to others, and even less likely to express these emotions (Wallin, 2007). Furthermore, individuals who have negative early relationship experiences may avoid disclosing their difficulties (Vogel & Wei, 2005).

In contrast, individuals with anxious/preoccupied attachment (negative view of self) are often overwhelmed by their feelings and seek closeness from others. As their main threat is separation, loss, and being alone, the anxious individual is hypervigilant for signs of rejection, disapproval or withdrawal (Wallin, 2007). Therefore, although these individuals may be more likely to seek help, the heightened levels of perceived risk and vulnerability they experience can interfere with engaging in the therapeutic process (Shaffer *et al.*, 2006).

Considering the influences of the internal working models can help our understanding of the kind of difficulties individuals are likely to experience in seeking help for their problems. These are therefore most likely to influence their engagement towards psychological therapies. This could be demonstrated through initial presentation to services and appointment attendance throughout the intervention process. However, the early stages of therapy may be more susceptible to attachment difficulties, given the greater sense of uncertainty and the lack of an established 'secure base' (Dozier & Tyrrell, 1998).

If patients perceive psychological therapy as threatening, then it is likely to activate their attachment system. This may lead to alternative insecure attachment behaviours and result in disengagement from therapy. Little is known about the role of attachment and disengagement from therapy, although, theoretically, both anxious and avoidant patterns may be related to early termination. Avoidant patients may discontinue with therapy when the early sessions begin to challenge their self-sufficient, dismissive attachment strategies (Mikulincer *et al.*, 2009). In contrast, highly anxious patients may not be able to elicit enough comfort or reassurance from the therapist to manage their distress, leading them to disengage (Liotti, 2007).

Conceptualising this in relation to attachment theory can, therefore, provide a helpful framework to understand patient behaviour during early sessions and anticipate potential

difficulties within the engagement process. From reviewing the current literature, it would appear little research has been carried out on attachment patterns and engagement. Only two studies were found that examined attachment and therapeutic engagement. Lower levels of engagement were associated with avoidant clients and anxious clients were also found to have difficulty with the engagement process (Dozier, 1990; Korfmacher *et al.*, 1997). Further understanding is needed of how insecure patients experience therapy and what leads them to finding it frustrating, threatening and overwhelming. Therefore, the second aim of the current research is to explore the relationship between attachment patterns and early therapeutic engagement. This will be examined through appointment attendance during the initial stage of therapy.

2.3. Therapeutic Alliance

Much of the literature on the clinical application of attachment theory has focused on adult attachment and therapeutic alliance. There is now a growing body of evidence to suggest insecure attachment patterns can undermine the strength of alliance (Diener & Monroe, 2011). Understanding how this takes effect is, however, less clear. Eames & Roth (2000) suggest the role of ruptures may be influential, but little is known about what type of ruptures anxious and avoidant patients may be likely to experience. Therefore, further work is needed to establish the nature of the relationship between attachment and therapeutic alliance and to understand *how* insecurity interferes with its development.

Certainly the contribution of the clinician is vital to consider in the formation of the alliance. Less is known about therapist attachment patterns, although research has suggested they are more likely to report secure attachment patterns (Leiper & Casares, 2000). Secure attachment in clinicians is considered to be important in managing difficulties in therapy (Black *et al.*, 2005) and has been related to being able to respond more empathically to patients needs (Dozier *et al.*, 1994; Rubino *et al.*, 2000).

However, within the context of the dimensional model of attachment anxiety and avoidance, individual differences amongst clinicians will exist along these dimensions. Given that around one third of the population are thought to have interpersonal styles that could be considered as insecure, it is questionable that all mental health clinicians are able to provide a secure base for their patients (Goodwin, 2003). There has even been some research to

suggest that for a minority of clinicians, they may seek out a ‘compulsive caring’ profession to compensate for their attachment insecurities (Wilkinson, 2003). Little empirical evidence exists to support this theory, but clinicians who put greater efforts into helping their patients emotionally may be more vulnerable to burnout (Ma, 2007). It has also been suggested that anxious therapists may put greater emphasis on making patients like them and connect with them, due to their own attachment needs. This may lead to superficially strong alliances at the start of treatment (Sauer *et.al.*, 2003). However, this is unlikely to be sustained and considered to be less helpful as the intervention develops.

Even within securely attached professionals, individual differences of attachment patterns are likely to influence how a clinician works with a patient, both in terms of their interpersonal style and choice of therapeutic modality they work in. There has been some research to suggest that therapists adapt their responses and method of working in relation to patient attachment styles, adopting more affective and interpersonal techniques with overinvolved, anxious patients, and more cognitive approaches with avoidant, dismissive patients (Rubino *et al.*, 2000; Hardy *et al.*, 1998). Although these approaches make intuitive sense, it still remains unclear whether it is helpful to respond ‘in style’ to attachment patterns of patients and what other factors influence a therapist’s response (Slade, 2008). Further research is therefore needed to explore all of these factors and how they contribute to the process and experience of therapy.

As highlighted in the reported systematic review, empirical research into the patient/clinician dyadic attachment interaction is lacking. Secure attachment is generally associated with stronger alliance (Bruck *et al.*, 2006; Fuertes *et al.*, 2007). However, some tentative findings from the limited current research suggest contrasting attachment patterns of patients and clinicians may also strengthen alliance (Petrowski *et al.*, 2011; Bruck *et al.*, 2006; Sauer *et al.*, 2003; (Christine L. Tyrrell, Dozier, Teague, & Fallot, 1999a). The authors discuss these findings in relation to the disconfirming process that arises through the experience of working with dissimilar attachment models, that challenge existing patterns and facilitate change and growth (Tyrrell *et al.*, 2009). However the length of the patient-clinician relationship is likely to contribute to these processes, and it is unclear whether dissimilar attachment patterns may work to the same effect during early engagement and alliance at the start of an intervention (Sauer *et al.*, 2003). It may be that attachment patterns have more of an impact on alliance as it develops over time (Eames & Roth, 2000).

This highlights the complicated task a clinician faces during the early stages of therapy, in which the aim is to encourage the challenging experience of self-exploration whilst providing a secure base for the patient to do so (Dozier & Tyrell, 1998). Achieving the right balance in this process may be the key to engaging insecure individuals. Factors such as level of experience, and therapeutic style, in addition to clinician attachment patterns may influence this process, although this is less clear. Further research to explore these factors is required.

By improving our understanding of the interaction of attachment patterns, it could be possible to capitalise on individual differences within patient and therapist groups. The final aim of the current study, therefore, aims to explore this interaction between patient and therapist attachment in relation to the working alliance.

2.4. Methodological Issues

One further aspect to researching attachment patterns is the methodological issue in relation to how attachment is measured. As outlined in the previous systematic review, the two main approaches that have been developed are the interview method measured through the Adult Attachment Interview (AAI; George *et al.*, 1996) and the self-report method measured through a number of different questionnaires. There are strengths and weaknesses within both approaches, with the AAI providing rich attachment narratives that are most useful within the clinical context. However, despite the benefits of the AAI, it is a complicated measure that requires extensive training for individuals to be able to reliably administer and code (Levy & Kelly, 2009). The administration is also time-consuming, both for the interviewee and interviewer as is the coding process afterwards.

As a result of the AAI's demands on time and training, the self-report approach is often preferred for its quick and simple method, particularly in situations where time is limited. There are numerous different questionnaires that have been developed to measure attachment. However, as mentioned in the previous review chapter, there has been a movement away from categorising attachment 'types' to measuring attachment 'dimensions'. (Bartholomew, 1990) introduced the two-dimensional model of individual differences in attachment patterns (as previously illustrated in Figure 1.2), which helps to conceptualise the variations along the anxiety and avoidance dimensions.

Subsequent self-report measures have developed from this framework, including the most commonly used Experience of Close Relationships Scale (ECRS; Brennan *et al.*, 1998). In light of the time and training constraints of the AAI and the need for larger sample studies in this field, the self-report ECRS was selected for the current study.

2.5. Research Aims & Hypotheses

This current study therefore aims to investigate the role of the therapeutic attachment interaction in the initial stages of psychological therapy. In particular, patient attachment patterns and the interaction between patient and clinician attachment patterns will be explored in relation to patient engagement with services and therapeutic alliance.

1. The first aim of the reported study attempts to explore the attachment patterns of patients presenting to psychological services and clinicians delivering psychological therapies.

Hypotheses

- 1a. Higher presentation of insecure attachment patterns will be reported by patients
- 1b. Clinicians delivering psychological therapies will have more secure attachment patterns
- 1c. Insecure attachment patterns will be related to self-reported distress by patients

2. The second aim is to explore whether patient attachment patterns influence early engagement with mental health services and working alliance in psychological therapies.

Hypotheses

- 2a. Patients reporting lower levels of anxious and avoidant attachment patterns will be more likely to attend appointments
- 2b. Patients reporting lower levels of anxious and avoidant attachment patterns will develop more positive working alliances (as rated by both patients and clinicians)

3. The third aim is to explore clinician attachment patterns, and the interaction between both patient and therapist attachment on early engagement and therapeutic alliance.

Hypotheses

- 3a. Patients working with more securely attached therapists will be more likely to attend appointments and report higher ratings of working alliance.
- 3b. Higher ratings of working alliance will be reported when clinicians and patients have contrasting attachment styles.

Additional research questions

- Can a securely attached clinician (low anxiety/avoidance) moderate the effects of the client's attachment patterns on therapeutic alliance?
- Do certain combinations of patient and clinician attachment patterns strengthen the therapeutic alliance?
- Do clinician attachment patterns relate to choice of therapeutic model and/or level of job satisfaction?

3. Methodology

This chapter will outline methodological processes in the undertaking of the study.

3.1. Participants

In order to explore the attachment dyad interaction both patients and clinicians delivering psychological interventions were required to participate in this study. Patient participation was therefore dependent on clinician participation and commitment to the study.

3.1.1 Clinician Inclusion/Exclusion Criteria

All clinicians working in NHS Lothian adult mental care health services (general and specialised services) and qualified to deliver psychological interventions were eligible and invited to participate in this study. All professional roles were eligible to take part as well as clinicians working in a training capacity and information on professional title and length of experience was recorded.

In total, 126 clinicians were provided with a research pack, which resulted in 38 (30.2 per cent) providing consent to take part in the study. Out of the consenting clinicians, 14 clinicians each recruited one patient to take part in the study, nine clinicians each recruited two patients, three clinicians each recruited three patients, two clinicians each recruited four patients, and one clinician recruited six patients. The remaining nine clinicians (23.7 per cent) who consented to the study did not recruit any patients and therefore completed the clinician attachment measure only.

3.1.2 Patient Inclusion/Exclusion Criteria

Any new outpatient (aged 18 years and above) commencing a new psychological intervention within NHS Lothian adult mental health services was eligible to participate and invited to take part in this study. No exclusion criteria were applied in relation to diagnosis or presenting problem. Out of the 400 patient research packs that were produced, 260 packs were distributed to the 126 potential clinicians (who were each provided with two patient packs at the start of the study). A further 140 packs were then distributed around the psychological services offices and consulting rooms. Administration staff also assisted in the distribution of packs, by including them in new patient files. Based on the remaining packs in the offices and information from clinicians, 132 research packs were distributed to

patients by participating clinicians, inviting them to take part in the study. This resulted in 55 (41.7 per cent) patients providing informed consent to participate.

3.1.3 Levels of participation

Despite significant promotion of the study and reported enthusiasm from members of staff, participation in the study was considerably lower than estimated. As patient participation was dependent on the level of clinician participation, this had a negative impact on the sample size. Reasons for reduced levels of participation provided by consenting therapists included increased demands on time and difficulty remembering to distribute the relevant packs and questionnaire measures. Further reasons involving sensitivity to very distressed patients were also reported. A number of trainee psychologists also reported having insufficient time to recruit new patients on their particular clinical placements.

3.2. Design

In order to explore the role of attachment with minimal manipulation to the therapeutic environment, a non-experimental observational design was adopted. This allowed patients to receive treatment as usual, thus avoiding any ethical issues of interfering with or restricting treatment in anyway. Within the reported study a questionnaire-based cross-sectional design was used to measure attachment styles, engagement and therapeutic alliance. It is, however, part of a larger pilot study on attachment theory that examines clinical outcomes in addition to the engagement and therapeutic alliance variables addressed in this paper.

3.3 Procedure

3.3.1 The Recruitment Process

In order for the research study to be promoted, a short presentation was created to introduce the study and outline previous research, theories, rationale, aims and methodology. All adult mental health teams throughout NHS Lothian were identified and team leaders were contacted to arrange a convenient time to present the research, most commonly during a

routine team meeting. Eleven teams were contacted in total, which resulted in nine presentations being arranged.

By presenting the research to the different teams, it provided the opportunity for potential participating clinicians to ask questions and for any concerns or confusion about the research to be discussed and explained. It also allowed for research packs to be handed out in person. This method was adopted to outline the rationale of the research and highlight its relevance to clinical work. It also allowed for discussion about the topic, which helped with its promotion. Therefore, significant efforts were made to meet with as many potential clinicians face to face. On the occasions where this was not possible, research packs (which included an introduction and overview of the research) were posted out to eligible clinicians.

In addition to face-to-face presentations, posters and leaflets about the research were produced and distributed throughout the relevant team buildings and offices. Posters were also displayed in some clinical consulting rooms, as well as administration offices where questionnaire packs were made available. In order to maintain the promotion and awareness of the study after the initial launch, frequent reminders were sent out. This was facilitated through email distribution lists for the participating clinicians set up by an independent administrator, which allowed for reminders and updates about the study to be regularly issued.

As the sample included both patients and clinicians, the separate procedures for introducing the research are described below:

3.3.2 Clinician Procedure

Clinicians were introduced to the study and invited to participate by the researchers. A clinician consent form explained that the information collected was confidential and responses would be made anonymous through the use of a unique ID coding system. If they consented to the study, they were provided with a clinician research pack that contained the initial attachment questionnaire measure. They were required to complete a self-report attachment measure, the Experience in Close Relationships Scale (ECRS; Brennan *et al.*, 1998), which they were required to return anonymously in a sealed envelope, marked with their unique ID code. In addition to this questionnaire, clinicians were asked to provide

some demographic and additional information on length of experience, preferred therapeutic model and job satisfaction.

Participating clinicians were also provided with three initial patient packs that they were asked to give to new patients with whom they were starting a new psychological intervention.

3.3.3 Patient Procedure

Patients were invited to participate in the study by their clinician at their first appointment. Sensitivity was encouraged over the timing of when the study was introduced, and it was suggested that clinicians hand out the research pack at the end of the first appointment. For patients who were particularly distressed at their initial appointment, it was considered appropriate to introduce the study at the second appointment. Clinicians were asked to record the appointment number that the initial questionnaires were given out, if this was not at the first appointment.

Clinicians provided the information sheet, consent form and initial questionnaire pack including the Clinical Outcomes Routine Evaluation Outcome Measure (CORE-OM; Systems Group 1998) and the ECRS (Brennan *et al.*, 1998) to the patient. They were asked to read the information at home and return the consent form and questionnaires to their clinician at the next appointment, should they wish to take part in the study. Addressed envelopes were included in the packs to allow questionnaires to be returned confidentially.

The use of an ID coding system allowed questionnaires to be returned anonymously but allowed for patient and clinician data to be linked up. Both patients and clinicians received clear instructions to write their unique research code on all measures and envelopes that they completed to facilitate this process.

3.3.4 Working Alliance

During the time between the third and fourth sessions, both patients and clinicians were required to complete their respective versions of the Working Alliance Inventory (WAI-s; Tracey & Kokotovic, 1989). The selected time period was chosen to focus on the formation

of the *early* therapeutic alliance. Clinicians were asked to provide the client version to patients at the third session and complete their therapist version.

As this questionnaire aims to gain both the patient and clinician's perspective on the therapeutic alliance, the presence of the other person could influence the responses given. Therefore, to reduce potential response bias, patients and clinicians were asked to complete the WAI-s in private. Patients were encouraged to complete the questionnaire at home and return it at the following appointment. All questionnaires were returned in sealed envelopes (addressed to the researchers) identifiable only by the respective ID codes.

3.4. Measures

Ethical considerations were given in the selection of questionnaires to reduce overburdening participants. As the patient population group are routinely sent standardised questionnaires with their initial appointment, decisions were taken to utilise that measure into the reported study. In keeping with the routine procedures of the service, it was hoped the study would seem more naturalistic and less invasive of the therapeutic experience.

3.4.1 Measure of psychological distress

The **Clinical Outcomes in Routine Evaluation-Outcome Measure** (CORE-OM; CORE Systems Group 1998) was therefore used as a self-report measure of psychological distress. Administered routinely within the local mental health services where the study was carried out, the CORE-OM is one of the most widely used outcome measures for psychological therapies (Barkham *et al.*, 2001). The 34 items in the CORE-OM comprise four domains; *well-being* (four questions), *problems/symptoms* (twelve questions), *social functioning* (twelve questions) and *risk* (six questions). All of the domains have equal high/low ratings to reduce ceiling and floor scoring effects. Items are scored on a 5-point scale, with respondents required to rate each item based on how they have felt over the past two weeks; 0 (not at all) 1 (only occasionally) 2 (sometimes) 3 (often) or 4 (most of all of the time). Clinical scores are calculated as the mean of all completed items, with higher scores indicative of greater psychological distress.

The measure provides clinical cut-off scores to discriminate between clinical and general populations and has been shown to have high internal consistency (.75-.95) and test re-test reliability (0.90), (Evans et al., 2002). As it is not used for specific diagnosis, the inclusive properties of the CORE-OM were considered appropriate for this study given the broad inclusion criteria for patient participants. In the reported study, internal reliability was (0.97).

For the reported study, two additional non-routine questionnaires were also used to provide measures of adult attachment and therapeutic alliance, which are described below:

3.4.2 Measure of attachment

The **Experiences in Close Relationships Scale** (ECRS; Brennan, Clark & Shaver, 1998) was selected as an adult attachment measure. The 36-item self-report inventory measures adult attachment through two fundamental dimensions: attachment-related anxiety (i.e., the extent to which people are insecure vs. secure about the availability and responsiveness of others) and attachment-related avoidance (i.e., the extent to which people are uncomfortable being close to others vs. secure depending on others). Measuring attachment on a two-dimensional level is a significant development and in current attachment research the ECRS is the most commonly used self-report measure of adult attachment (R.C. Fraley & Philips, 2009).

It has also been reported as a highly reliable and valid measure (Wei *et al.*, 2007). High internal consistency for the ECRS (with anxiety and avoidant subscales producing reliability coefficient of .91 and .94 respectively) has been reported (Brennan *et al.*, 1998) and replicated by a number of subsequent studies (e.g., Lopez & Gormley, 2002; Vogel & Wei, 2005). The internal reliability in the reported study was (0.78) for the patient group and (0.73) for the therapist group.

The ECRS consists of 36 statements about close relationships, and individuals are required to rate the statements from 1 (*disagree strongly*) to 7 (*agree strongly*), with point 4 being neutral. Respondents are scored on both the anxiety and avoidant dimensions, rather than classified as having a particular attachment style. Mean scores are used, with higher scores

on the *Anxiety* and *Avoidant* subscales indicative of higher levels of attachment anxiety and avoidance.

3.4.3 Measure of therapeutic alliance

The **Working Alliance Inventory** (WAI-s; shortened client & therapist versions; Tracey & Kokotovic, 1989). The 12-item shortened WAI-s was derived from the 36-item original version (Horvath & Greenberg, 1989) and is one of the most frequently used questionnaires for measuring therapeutic alliance. It was developed specifically for use in the early phase of therapy (Eames & Roth, 2000), which made it particularly suitable for use in the reported study. The WAI-s has been evidenced to have comparable psychometric strengths to that of the full 36-item version (Busseri & Tyler, 2003), and, therefore, the shorter version was selected due to its succinct appeal. Strong internal consistency reliability has been frequently reported (0.95) for therapist and (0.98) for patient, along with concurrent and predictive validity (Tracey & Kokotovic, 1989).

The measure was developed in relation to (Bordin, 1979) three-dimensional model of alliance, which incorporates task, bond and goals. The WAI-s, therefore, provides three sub-scale scores for: *Bond* (the emotional bond of trust & attachment between clients and therapists); *Goals* (the level of agreement concerning the overall goals of treatment) and *Tasks* (the degree of agreement concerning the tasks relevant for achieving these goals). Respondents rate each of the 12 items using a 7-point rating scale from 1 (never) to 7 (always) to measure the quality of the working alliance. Total scores range from 12 to 84 where higher scores are indicative of stronger working alliance. Scores can also be calculated for three sub-domains: Bond, Goals and Tasks (minimum=4; maximum=28).

There are three different versions of the WAI-s questionnaire for patient, therapist and observer. This provides strength to the measurement of alliance through the inclusion of multiple ratings. For the reported study, both the patient and the therapist versions of the WAI-s were used, with internal reliability as (0.80) patient version and (0.83) therapist version.

Research Packs

The above measures, along with the research information sheets and consent forms were organised into individual research packs. Separate packs were produced for potential patients and clinicians. Within the clinician research pack, there was an overview of the study, a consent form, questionnaire measures and an instruction sheet to follow whilst participating in the study. The patient research pack contained a patient information sheet, consent form and the initial questionnaires.

3.5. Ethics

The South East Scotland Research Ethics Committee (01) granted ethical approval for this study in August 2011 via the Integrated Research Application System (IRAS). A review of the research proposal led to the request of some minor changes to the Patient Information Sheet and Consent Form and the inclusion of a consent form for clinicians, after which ethical approval to proceed with the study was granted. (Ethics approval reference: 11/AL/0375; Appendix ii). The Lothian NHS Research & Development Office also approved the study (Appendix iii). The data set used in this study was collected between September 2011 and June 2012.

3.5.1. Ethical considerations

Patient Informed Consent

In order to fully explain the research to potential participants, a participant information sheet and consent form were produced (Appendix iv). This outlined the aims of the research and gave clear descriptions of what would be involved of participants throughout the study. It also provided important information that participants were able to withdraw from the study at anytime and that their participation had no impact on the treatment they received.

The accompanying consent form (Appendix v) provided a detailed breakdown of the different aspects of the study and participants were able to choose what parts they wished to consent to. This was used to record explicit written consent from patient participants.

Clinician Informed Consent

In accordance with ethical approval conditions, a consent form for clinicians was also produced (Appendix vi). This was considered important given the potential self-exposure involved in participating in the study. In order for staff to be informed about the research, presentations of the study were organised for each of the different teams within the service and all clinical staff were invited to attend. In addition, a written overview of the research was also produced to inform staff of the study's aims and objectives. Information was also provided about the requirements of participating.

Anonymity and Confidentiality

Following an initial presentation of the research proposal at a local psychology department meeting, a poll was organised which led to the selection of a design that allowed for staff anonymity. Given that the researchers worked within the department, the anonymous design was selected to reduce staff vulnerability and exposure, and to encourage participation. An administrator within the psychology department (independent of the research) facilitated with anonymisation and assigned a unique ID code to all staff taking part in the study. She was subsequently involved in following up missing questionnaires through email enquiries to participating clinicians.

Patients were asked to use their initials and date of birth as their unique identifier for the study. This allowed for additional demographic, diagnostic (presenting problem) and treatment information (previous contact with services and appointment attendance) to be obtained from electronic and paper records. All this information was accessed through secure NHS networks and confidential clinical files. Returned consent forms and completed questionnaires were stored in a locked filing cabinet within the psychology department. After the data had been collected through the returned forms, any identifiable information was separated, and the anonymous data were stored in an electronic database.

3.6 Analysis

Statistical methods

Analysis was carried out using SPSS (version 17.0).

To test for differences between attachment patterns and patient variables, and therapist attachment patterns, independent t-tests were performed. Also, to examine the relationship between attachment patterns and levels of psychological distress, correlational analyses were used.

Standard multiple regression analyses were used to explore the relative contribution of patient attachment (anxiety and avoidance variables) on psychological distress and therapeutic alliance. Moderated multiple regressions were used to explore the relative contribution of both patient and therapist attachment patterns, and the interaction of both attachment patterns on therapeutic alliance.

Finally relationships between therapist attachment patterns, length of experience, choice of therapeutic modality and levels of job satisfaction were explored also through the use of correlational analyses.

A Priori Power Calculation

A medium effect size was selected based on the limited research available. For this effect size ($f = 0.15$) to be detected using standard multiple regression analyses with two predictor variables, with power at .80, a sample size of 67 participants was indicated. This was based on published power tables (Cohen, 1992). For a similar effect size to be detected through hierarchical multiple regression analyses with a first set of two predictor variables and a second set of four predictor variables, a sample size of 86 participants was indicated.

As the required sample size was not met, further post-hoc power calculations were performed (using G*Power analysis program) to reduce the misinterpretation of the results.

4. Results

4.1 General and demographic information

Patient participants

Fifty-five patients consented to take part in the study and completed first appointment measures. From this sample, 39 (70.9 per cent) were females and ages ranged from 18 – 73 years (mean age = 39.9; SD = 13.07). Eighteen (32.7 per cent) of the patients had received previous psychological interventions prior to commencing this episode. *Figure 4.1* shows a breakdown of the main presenting problems for the patient sample.

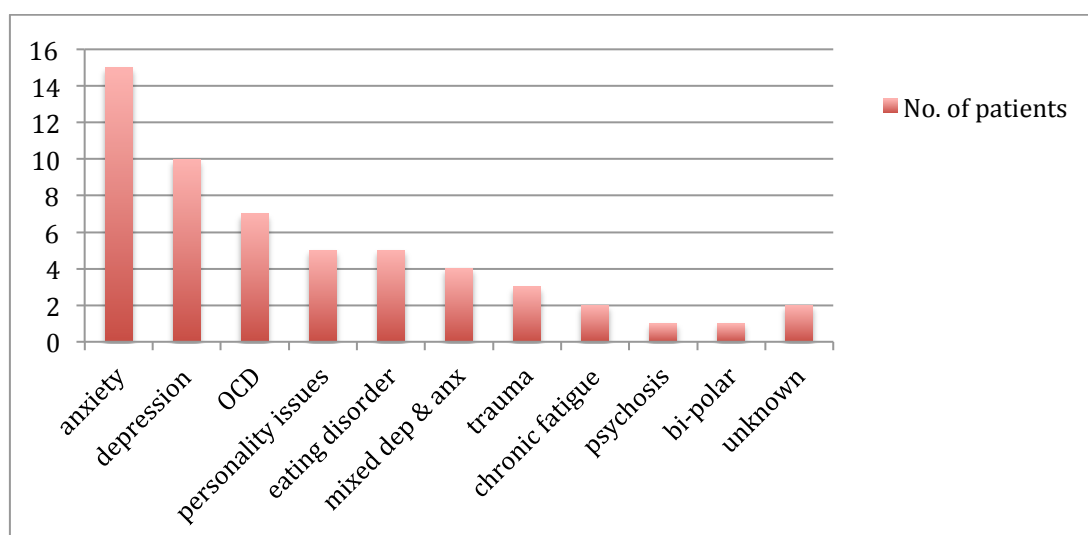


Figure 4.1: Dispersion of patient presenting problems

Therapist participants

Thirty-eight clinicians consented to take part in the study, 32 (84.2 per cent) were female. The overall level of experience ranged from 0 – 31 years (mean = 10.89; SD = 8.65). Cognitive behavioural therapy (CBT) was the preferred therapeutic model, with 30 (78.9 per cent) of the clinicians rating it as their first choice of modality. Cognitive analytic therapy (CAT) was the second highest rated model (15.8 per cent), with solution-focused (2.6 per cent) and mindfulness (2.6 per cent) the other two models of choice. Further details about the clinician group are shown in *Table 4.1* relation to the different professional roles.

Table 4.1 Clinician's professional role, preferred model and years of experience

Professional Role	N	%	Years of experience	
			Mean	SD
Psychologist	15	39.5	15.13	7.16
Trainee psychologist	10	26.3	2.10	2.13
Psychological therapist	6	15.8	16.50	9.20
Clinical Associate Applied Psychology	4	10.5	4.25	1.71
CPN / nurse therapist	3	7.9	16.67	5.86

The demographic data indicated that both the patient and clinician samples were considered to be representative of routine patient referrals and the general workforce of psychological services.

4.2 Data normality and parametric assumptions

Preliminary analyses were carried out across the variables to ensure there were no violations of parametric assumptions. Inspection of Normal Q-Q plots, boxplots and Kolmogorov-Smirnov statistics indicated patient data were normally distributed. Kolmogorov-Smirnov values and Normal Q-Q plots indicated both clinician attachment variables (anxiety and avoidance) were positively skewed (towards the securely attached). Logathrim transformations were therefore conducted to increase the normality of distribution. This produced non-significant Kolmogorov-Smirnov values of .195 for anxious attachment and .200 for avoidant attachment and inspection of the Normal Q-Q plots suggested normal distribution¹.

4.3 Patient and clinician attachment patterns

Mean scores from the Experience Close Relationships Scale (ECRS) for anxious attachment and avoidance attachment were calculated for both the patients and clinicians, shown in

Table 4.2. These were compared to the available norms for the ECRS².

¹ Logathrim values have therefore been used for analysis on clinician attachment variables

² Based on a sample population of 22,000 (78 per cent female) with a mean age of 24 (SD = 10), (Fraleigh *et al.*, 2000).

Table 4.2: Mean scores and Std. Deviation of anxious and avoidant attachment patterns

	N	Mean	Std. Deviation
Patient anxious attachment	55	4.43	1.24
Patient avoidant attachment	55	4.38	1.18
Clinician anxious attachment	38	2.01	0.85
Clinician avoidant attachment	38	2.35	0.85
<i>ECRS norm anxious attachment</i>	<i>22,000</i>	<i>3.64</i>	<i>1.33</i>
<i>ECRS norm avoidant attachment</i>	<i>22,000</i>	<i>2.93</i>	<i>1.18</i>

One sample t-tests were therefore conducted to compare the patient and clinician attachment mean scores with the ECRS norm means (shown in Table 4.3). The patient's mean scores were significantly higher than the norm means on both dimensions indicating higher levels of insecure attachment. In contrast, clinicians' attachment scores were significantly lower than the ECRS norm mean on both dimensions indicating high levels of secure attachment.

Independent-samples t-tests were also conducted to compare the anxiety and avoidance attachment scores for patients and clinicians. Significant differences were found with patients reporting significantly higher levels of attachment anxiety and avoidance than clinicians, as shown in Table 4.3.

Table 4.3 One sample and independent t-tests between ECRS norms, patients and clinicians

Comparison groups	(df)	t	p value	Cohen's d	Effect size
One Sample: Patient / ECRS Norms					
- anxious attachment	54	4.75	<.000	1.29	0.54
- avoidant attachment	54	9.08	<.000	2.47	0.78
Clinician / ECRS Norms					
- anxious attachment	37	-150.09	<.000	49.30	0.99
- avoidant attachment	37	-159.78	<.000	52.52	0.99
Independent: Patients / Clinicians					
- anxious attachment	91	11.18	<.000	2.34	0.76
- avoidant attachment	91	9.60	<.000	2.01	0.71

4.4 Patient attachment and psychological distress

To explore the relationship between patient attachment patterns and self-reported levels of psychological distress, Pearson product-moment correlation analyses were conducted and results are shown in Table 4.4. No significant correlation was found between the patient anxiety and avoidance attachment variables: $r = .23$, $n = 55$, $p = .095$.

Table 4.4. Pearson product-moment correlations between patient attachment anxiety & avoidance and psychological distress

N= 53	Patient Anxiety	Patient Avoidance
CORE Total	.525**	.447**
CORE Wellbeing	.576**	.331*
CORE Problems/ symptoms	.456**	.347*
CORE Functioning	.535**	.522**
CORE Risk	.361**	.442**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The CORE mean total score and the four sub-scores (wellbeing, problems/symptoms, social functioning and risk) were all significantly correlated with both anxiety and avoidant attachment scores, mostly $p < .01$.

Multiple regression analysis was therefore carried out to assess the ability of patient attachment to predict levels of psychological distress. Patient anxious and avoidant attachment were entered as the two predictor variables and the total core score as the outcome variable through a standard *enter* model. The regression model was significantly predictive of psychological distress; $F(2, 50) = 15.90$, $p < .000$, (R Square = .389), explaining 38.9 per cent of the variance. Both attachment variables were significant predictors, with anxious attachment recording a slightly higher β value than avoidant attachment as shown in table 4.5.

Table 4.5. Multiple regression analysis predicting psychological distress from patient attachment

	B	SE B	β	t
Anxious attachment	.32	.08	.45***	3.93
Avoidant attachment	.26	.08	.35**	3.04

$p < .05^*$, $p < .01^{**}$, $p < .001$

A post-hoc power calculation indicated the regression model had a power value of 0.99 ($\alpha = 0.05$, with two predictor variables, R Square = 0.39). Patient attachment (both anxious and avoidant) patterns were therefore predictive of reported psychological distress.

4.5 Patient attachment and early engagement

At the time of analysis, data for the attendance at the first five appointments were available for 50 patients. Of these 50 participants who began a new psychological intervention, four (8 per cent) dropped out of treatment during the first five appointments. The number of appointments attended (out of the first five scheduled appointments) is shown in Table 4.6, in relation to mean anxiety and avoidant scores.

Table 4.6. Mean scores of anxiety and avoidant attachment in relation to appointment attendance

Appointments attended (of first 5)	N	Mean (SD)	
		Anxiety	Avoidance
2	4	4.97 (.62)	5.40 (1.24)
3	23	4.38 (1.27)	4.80 (1.18)
4	13	4.71 (.88)	4.12 (.92)
5	10	4.42 (1.21)	3.53 (.83)

The plots of the mean scores are shown in figure below in Figure 4.2 to illustrate the patterns of attachment and early appointment attendance.

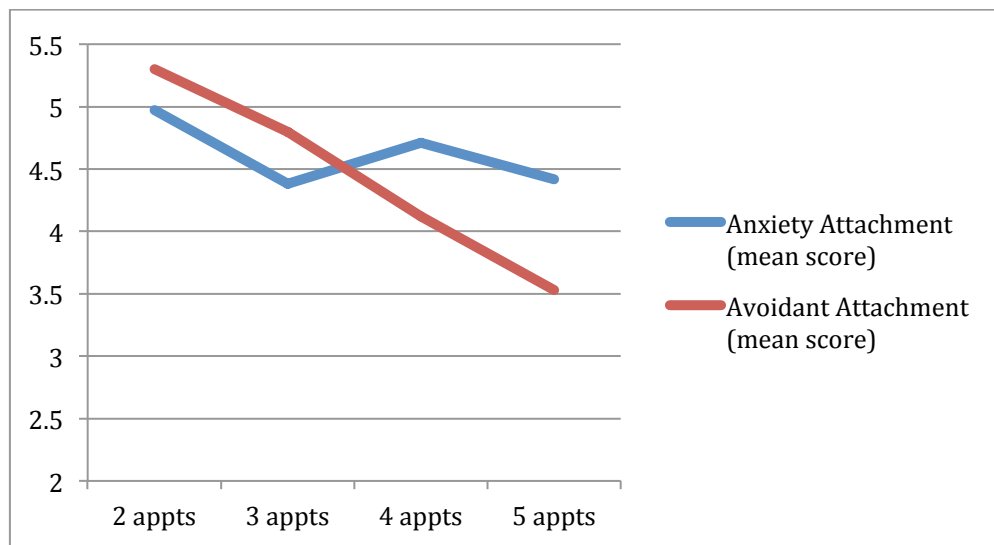


Figure 4.2: Early appointment attendance by patient's anxious and avoidant attachment

The relationship between early appointment attendance, psychological distress and attachment anxiety and avoidance was explored through Pearson product-moment correlation analyses, shown in Table 4.7.

Table 4.7 Pearson correlations of patient attachment, psychological distress and appointment attendance

n=50	Patient anxiety	Patient avoidance	CORE Total (psychological distress)	no of appts attended (first 5)
Patient anxiety	.-	.228	.525**	-.167
Patient avoidance		.-	.447**	-.488**
CORE Total (psychological distress)			.-	-.258

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Patient attachment avoidance showed a strong negative correlation with attendance of first appointment (n=50, $r = -.488$, $p > .000$).

4.6 Patient attachment and therapeutic alliance

At the time of analysis, data on the working alliance was available for 43 therapeutic dyads. Overall both patient and therapist ratings on the WAI-s were high, as shown in Table 4.8.

Table 4.8 Patient and therapist mean ratings on the WAI-s

	Mean	(SD)	Range
Patient total rating	63.50	(12.89)	31 - 84
Therapist total rating	66.55	(10.86)	33 – 82

WAI-s total possible ratings min=12, max=84 (median = 48)

Given the possible influence of attachment patterns on working alliance ratings, both patient and therapist ratings were explored. Pearson product-moment correlation analyses were conducted to test the relationship between the working alliance (WAI-s) ratings for patients and therapists. The total scores and all sub-scores were significantly related, as shown in Table 4.9 indicating high reliability across the ratings.

Table 4.9. Pearson correlations for patient and therapist working alliance ratings (WAI-s)

N=43	patient total	patient task	patient bond	patient goal	therapist total	therapist task	therapist bond	therapist goal
patient total	–	.907**	.887**	.923**	.656**	.642**	.572**	.628**
patient task		–	.683**	.800**	.556**	.570**	.451**	.538**
patient bond			–	.711**	.598**	.600**	.532**	.549**
patient goal				–	.625**	.572**	.566**	.618**
therapist total					–	.960**	.900**	.949**
therapist task						–	.791**	.899**
therapist bond							–	.753**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

To explore the relationship between patient attachment and working alliance³, Pearson product-moment correlation analyses were carried out, shown in Table 4.10. Significant relationships were revealed in relation to both attachment groups and all WAI categories.

Table 4.10 Pearson correlations for patient attachment & WAI

(n=43)	patient avoidance	WAI total	WAI task	WAI bond	WAI goal
patient anxiety	.228	-.397**	-.368*	-.325*	-.388*
patient avoidance	–	-.461**	-.475**	-.322*	-.463**
WAI total		–	.907**	.887**	.923**
WAI task			–	.683**	.800**
WAI bond				–	.711**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Multiple regression analysis was conducted to assess the ability of patient anxiety and avoidant attachment to predict therapeutic alliance ratings. Using a standard *enter* model, patient anxiety and avoidant attachment were entered as the two predictor variables, with total working alliance (patient rating) as the outcome variable. The regression model was statistically significant in predicting the total working alliance score, $F(2, 40) = 8.67$, $p < .001$, (R Square = .302) explaining 30.2 per cent of the variance.

³ Patient ratings of WAI used in this analysis

Table 4.11. Multiple regression analysis predicting working alliance from patient attachment

	B	SE B	β	t
Anxious attachment	-3.21	1.42	-.31*	-2.27
Avoidant attachment	-4.24	1.47	-.39**	-2.88

p < .05*, p < .01**, p < .001

Post-hoc power calculation showed the regression model had a power value of 0.97 ($\alpha = 0.05$, two predictor variables, R Square = .30). Patient attachment (both anxiety and avoidant) patterns were therefore predictive of therapeutic alliance.

4.7 Clinician attachment, early engagement and therapeutic alliance

Pearson product-moment correlation analyses were conducted to first test the relationship between therapist attachment (anxiety and avoidance), patient early engagement (appointment attendance) and working alliance (both patient and therapist WAI-s ratings). The correlation figures are shown in Tables 4.12.

Table 4.12 Pearson correlations with therapist attachment variables

(n = 43)	therapist avoidance	no of appts attended (first 5)	WAI total (patient rating)	WAI total (therapist rating)
therapist anxiety	.276	-.092	-.034	-.168
therapist avoidance	.-	-.050	.181	-.009
no of appts attended (first 5)		.-	.248	.176
WAI total (patient rating)			.-	.656**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

As no relationships were therefore found between therapist attachment patterns, engagement and therapeutic alliance, multiple regression analyses were not carried out.

4.8 Interaction between patient and clinician attachment

To explore the interaction between patient and clinician attachment moderation multiple regression analysis was carried out. The interaction was tested by creating new attachment interaction variables (or product terms), produced by multiplying the predictor (patient attachment) and moderator (clinician attachment) variables together (Aiken & West, 1991). The four interaction variables were therefore: *patient anxiety*therapist anxiety*, *patient anxiety*therapist avoidance*, *patient avoidance*therapist avoidance*, and *patient avoidance*therapist anxiety*. To reduce the risk of multicollinearity problems, the attachment values were standardised, before being computed into the new interaction variables (Frazier *et al.*, 2004).

Hierarchical multiple regressions were used to assess the interaction on working alliance as rated by both patients and therapists. For the two criterion variables (patient and therapist working alliance ratings) the regression model included six predictor variables; two patient-level variables (anxiety and avoidant attachment patterns) and four interaction variables representing the various combinations of patient and therapist attachment interactions. In light of the small sample size, Type II error rate was controlled by the use of a familywise error rate of .10 when testing regression coefficients of significant models. Type I error rates were controlled within the model by conducting tests on individual regression coefficients at the 0.125 level (as followed by Romano *et al.*, 2009, 2008).

Patient attachment anxiety and avoidance were entered at Step1, explaining 28.9 per cent of the variance, as previously reported. In Step 2, the four attachment interaction variables (patient anxiety*therapist anxiety, patient anxiety*therapist avoidance, patient avoidance*therapist avoidance, and patient avoidance*therapist anxiety) were entered but the model was non-significant, as shown in Table 4.13.

Table 4.13. Hierarchical multiple regression analysis predicting working alliance (patient ratings) from patient and therapist attachment

Step/variable	R Square	Adj R Square	R Square change	F	df	B	SE	β
<i>Main effects (Step1)</i>	0.29	0.25	0.29	8.11**	2, 40			
P Anxiety						2.98	1.44	0.288
P Avoidance						4.17	1.54	0.378*
<i>Interactions (Step2)</i>	0.33	0.21	0.04	0.56	4, 36			
P Anxiety * T Anxiety						1.18	2.35	0.132
P Anxiety * T Avoidance						1.50	2.39	-0.10
P Avoidance * T Avoidance						2.11	2.35	0.144
P Avoidance * T Anxiety						3.16	2.30	-2.23

(N = 43), P = patient; T = therapist. *p<.01. **p<.001.

The hierarchical multiple regression analysis was repeated for therapist ratings of the working alliance. A similar pattern emerged, with patient variables significant predicting 10 per cent of the variance, but no significant interaction effects from the second set of variables, as shown in Table 4.14.

Table 4.14 Hierarchical multiple regression analysis predicting working alliance (therapist ratings)

Step/variable	R Square	Adj R Square	R Square change	F	df	B	SE	β
<i>Main effect (Step1)</i>	0.14	0.14	0.1	3.26*	2, 40			
P Anxiety						2.51	1.33	-0.288
P Avoidance						1.57	1.42	-0.169
<i>Interactions (Step2)</i>	0.17	0.03	0.03	0.33	4, 36			
P Anxiety * T Anxiety						1.60	2.20	-0.163
P Anxiety * T Avoidance						1.89	2.42	-0.08
P Avoidance * T Avoidance						1.01	2.21	0.017
P Avoidance * T Anxiety						1.37	2.15	0.119

(N = 43), P = patient; T = therapist. *p<.05. **p<.01.

No significant interaction effects were therefore found. However a post-hoc power calculation indicated the hierarchical regression model had a power value of 0.59 ($\alpha = 0.10$, with two predictor variables in Set 1 and four predictor variables in Set 4).

4.9 Clinician attachment, experience and job satisfaction

Additional therapists variables (length of experience, general job satisfaction and rewards from clinical work) were explored in relation to the attachment patterns of therapists. Pearson product-moment correlation analyses were conducted to test the relationship between the therapist variables, with the values shown in Table 4.15.

Table 4.15 Pearson correlations between therapist variables

(n=38)	therapist avoidance	years of experience	job satisfaction	rewards clinical work
therapist anxiety	.390*	-.264	.071	-.146
therapist avoidance	—	.186	-.079	-.161
years of experience		—	-.406*	-.219
job satisfaction			—	.406*

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

No relationship was found between the therapist's attachment patterns and any of the variables explored. The length of experience was however related to general job satisfaction (which was focused towards the service organisation, referral process, caseload and waiting list management). This was a significant negative relationship, with more experienced staff being less satisfied with their work. The rewarding experience from clinical work was explored through a separate variable, which was related to levels of job satisfaction.

Given the lack of variance in the clinician's preferred therapeutic modality (with 78.9 per cent favouring CBT) no analysis was carried out on the choice of model in relation to therapist attachment styles.

Although not asked for, some therapists had provided some additional comments on their questionnaires forms, explaining some of their views about job satisfaction. These comments were not analysed formally. However, most of the comments related to the issue of poor attendance and engagement of patients, which appeared to cause the greatest frustration with regards to their clinical work.

4.10 Summary of Findings

➤ *Patient attachment patterns*

The patient sample provided significantly higher ratings on attachment anxiety and avoidance scales on the ECRS. Patient attachment (anxiety and avoidant) patterns were related to psychological distress. Further analysis revealed that greater levels of anxiety and avoidance attachment were predictive of greater levels of distress.

In relation to appointment attendance, patients scoring higher on the attachment avoidant scale attended significantly fewer appointments during the early stage of psychological therapy. Patient attachment patterns were also significant predictors of working alliance ratings, with both patient anxiety and avoidance inversely related to the scores on the working alliance inventory.

➤ *Therapist attachment patterns*

The therapist sample provided significantly lower ratings on attachment anxiety and avoidance scales on the ECRS, indicating high levels of secure attachment. Therapist attachment patterns were not related to patient engagement or working alliance. Therapist ratings on the working alliance inventory were related to patient ratings, suggesting attachment styles did not influence the perception of therapeutic alliance.

➤ *Interaction effects between patient and therapist attachment patterns*

No significant interaction effects between patient and therapist attachment patterns were found, suggesting the therapist attachment style did not moderate the effect of patient attachment style on the early working alliance.

5. Discussion

The overall aim of the study was to explore how attachment patterns of both patients and therapists influence the early stages of psychological therapy, in particular engagement (through early appointment attendance) and therapeutic alliance. Attachment patterns of both patients and therapists were examined and compared, and patient attachment was explored in relation to reported levels of psychological distress. The limited literature in this area of research has indicated that insecure attachment patterns can interfere with the therapeutic process (Barron, 2012; Diener *et al.*, 2009; Black *et al.*, 2005). Previous research has tended to focus on patient attachment, however, and less is known about the role of therapist attachment and the interaction process between patient and therapist attachment. The current study, therefore, aimed to contribute to this area by exploring both groups of attachment patterns within the early psychological therapy process.

5.1 Discussion of main results

5.1.1 Hypothesis 1a & 1b – Attachment patterns

The first aim of the study was to assess patient and therapist attachment patterns. In line with the first hypotheses, the patient sample group reported significantly higher levels of attachment anxiety and avoidance in comparison to both the norm mean (on the ECRS measure of attachment) and the therapist sample group. In addition, the therapist sample also reported significantly lower levels of anxiety and avoidance in relation to the norm mean measure.

Although this was an expected finding, the positive skew in the distribution of the reported therapist attachment scores indicated the large majority of therapists reported exceptionally low anxious and avoidance levels. This suggests the therapist sample in this study had extremely secure attachment patterns. This finding is comparable to other research on clinician attachment, where high levels of attachment security have been reported (Leiper & Casares 2000). However greater variation in attachment patterns amongst therapists have also been found in other studies (Rubino *et al.*, 2000; Tyrrell *et al.*, 1999; Dozier *et al.*, 1994).

The high levels of attachment security may therefore be related to the use of a self-report measure of attachment. Given therapists would have a greater understanding of attachment theory and the concept of attachment patterns, the possibility of biased responses should be acknowledged. Efforts were made to increase honest responses from therapists by developing an anonymous design. This was hoped to reduce social desirability effects and biased responses to gain a true representation of attachment patterns. It is also possible the therapists who volunteered to participate were not representative of the more general workforces, producing a bias sample with inflated levels of attachment security.

5.1.2 Hypothesis 1c - Patient attachment patterns and psychological distress

As predicted, significant positive correlations between the self-report measure of psychological distress and both anxious and avoidant attachment were found. Further exploration through regression analysis revealed that both attachment anxiety and attachment avoidance were predictive of total psychological distress reported by patients. This finding is supportive of current literature on clinical applications of attachment theory, where insecure attachment patterns have been linked with higher vulnerability towards developing interpersonal and psychological problems (Holmes, 1997).

This fits with the current literature and the strong association between psychological disorders and insecure states of mind (Dozier *et al.*, 2008). This can be understood within the context of disturbed attachment bonds from infancy to adulthood, where internal working models influence subsequent relationships, increasing the individual's vulnerability to stress (Goodwin, 2003). The cause and effect of interpersonal difficulties, social isolation and emotional regulation problems can therefore become blurred, as psychological problems become intertwined with attachment difficulties, leading to the perpetual reinforcement of negative experiences.

5.1.3 Hypothesis 2a – Patient attachment patterns and early engagement (appointment attendance)

Patient attachment patterns were also related to early engagement, which was measured through appointment attendance of the first five appointments. In line with the hypothesis,

correlation analyses revealed a negative relationship between patient avoidant attachment and appointment attendance. However there was no relationship between patient anxious attachment and appointment attendance. The hypothesis was therefore partially supported in that only lower levels of avoidant attachment were associated with better appointment attendance.

This finding can be understood in relation to previous research on help-seeking behaviour where attachment styles appear to moderate the choice of support-seeking as an emotion regulation strategy (Mikulincer & Shaver, 2008). Theoretically, individuals with higher anxiety attachment will engage in excessive behaviours and hyperactive strategies to gain support and attention from others, in contrast to individuals with avoidant attachment patterns, who use deactivating strategies to discount the severity of their emotions and distance themselves from their emotions and others (Wei et al., 2005). It would therefore appear that this attachment differentiation of support seeking is evident in the patient group within this study.

In view of the deactivating strategies utilised by the avoidant patient, the process of therapy is likely to be experienced as futile, with little to offer, or representative of a threat, which must be contained or avoided (Wallin, 2007). Difficulties with engagement can therefore be understood in relation to the attachment system and internal models. In relation to attachment avoidance, engagement problems may therefore be more prevalent in the early stages of therapy. An interesting sequel to this study would be to explore appointment attendance throughout the duration of treatment to determine whether avoidant attachment continues to influence engagement or whether this pattern balances out.

5.1.4 Hypothesis 2b – Patient attachment patterns and therapeutic alliance

In accordance with the hypothesis, patient attachment (both anxious and avoidant) patterns were significantly predictive of therapeutic alliance, where higher anxiety and avoidance attachment was related to lower ratings on the working alliance inventory. These findings are congruent with previous literature which suggests that anxious and avoidant attachment patterns hinder the development of an effective therapeutic alliance (Mallinckrodt, 2000; Meyer & Pilkonis, 2001; Eames & Roth, 2000; Satterfield & Lyddon, 1998). Patients lower on anxiety and avoidant attachment tend to have positive working models, allowing

them to trust others and make use of help and support from others when required (Hietanen & Punamaki, 2006).

In relation to this, forming a therapeutic alliance with a mental health professional is therefore a more challenging process for individuals with higher levels of anxiety and avoidance. For the more anxious patients, fears of the therapist being unable to meet their needs or understand them may overwhelm clinicians and interfere with the working alliance. In contrast, avoidant patients are more likely to dismiss the support of the therapist and the value of the therapeutic relationship (Wallin, 2007). Therefore, for very different reasons, patients with greater anxiety and avoidant attachment styles are more likely to have difficulty forming successful therapeutic alliances.

Given the fundamental interpersonal process of therapy, the perception of therapeutic alliance is potentially influenced by attachment patterns. Therefore, poor ratings may be in response to the patient's internal working models and expectations of therapy (Satterfield & Lyddon, 1998). Naturally, the experience of what is helpful and supportive is always going to be a subjective matter. However, the strong correlations between therapeutic alliance ratings from patients and therapists would also suggest that, objectively, therapeutic alliance is reduced through attachment anxiety and avoidance. The use of multiple ratings therefore provides a richer picture of the dynamics between therapeutic alliance and attachment patterns (Hietanen & Punamaki, 2006).

5.1.5 Hypothesis 3a - Therapist Attachment

The second part of this study explored the influence of therapist attachment patterns and the interaction of therapist attachment and patient attachment. The hypothesis was not supported and no significant findings emerged between the clinician attachment patterns and early patient engagement or therapeutic alliance (ratings by both patients and clinicians). However, the overall low levels of attrition and the high working alliance ratings could be related to the particularly low levels of anxious and avoidant attachment reported by clinicians. Previous research where therapist attachment has been significantly associated with the therapeutic alliance has tended to relate to greater levels of anxiety and avoidance attachment patterns within the clinician sample (Sauer *et al.*, 2003; Tyrrell *et al.*, 1999).

However, as the sample in the reported study did not allow for comparisons with more insecure therapists, no conclusions can be drawn.

Given that the overall ratings for alliance were high, it could be that the security of the therapists allowed them to be flexible to the patient's attachment style, without having to attend to their own attachment needs, thus creating more positive alliances. Greater therapist attachment security has been shown to facilitate the resistance to the 'pull' of patient attachment behaviours (Dinger *et al.*, 2009; Tyrell *et al.*, 1999) considered to be helpful for the development of stronger, more productive working alliances for therapy.

Such 'flexibility' in the therapeutic approach is also related to the experience of a clinician, however (Daly & Mallinckrodt, 2009), and the majority of therapists in this study were considerably experienced. Previous studies exploring therapist attachment have tended to involve students and trainee counsellors and therapists, where the lack of experience may have also contributed to the significant findings of therapeutic alliance, rather than attachment patterns alone. So, rather than needing to 'match up' patient and therapist attaching styles, as previous research has suggested (Tyrell *et al.*, 1999), it may be that more experienced therapists can create the same "beneficial complimentary" relationship through adaptive, flexible practices (Daly & Mallinckrodt, 2009).

The absence of an association between therapist attachment and working alliance might also be understood through the lack of variance in their reported levels of anxious and avoidant attachment patterns. The small sample size may have also contributed to this, and, as some therapists recruited more than one patient, some of the ratings may have been influenced by the non-independent participation. The small effect size change ($f^2 = 0.042$) associated with the hierarchical regressions is also indicative that the study lacked sufficient power to detect any significant relationships and that a Type 2 error may have occurred.. Such methodological weaknesses of the research are discussed further within the sub-section on the limitations of the study.

5.1.6 Hypothesis 3b - Interaction of patient and clinician attachment patterns

No interaction effects were found between patient and therapist attachment patterns, failing to support the hypothesis that contrasting attachment patterns would be predictive of stronger

therapeutic alliances. As discussed above in relation to therapist attachment, the absence of any interaction effect may be related to the therapist's low variation of attachment patterns and high level of reported attachment security. Similar to the interpretation above, the interaction effects that have been reported in previous research may therefore be related to higher levels of anxious and avoidant attachment amongst therapists.

The focus in this study was to explore engagement and therapeutic alliance during the early stage of therapy. This was considered to be a crucial time in the formation of alliance and engagement, as well as the most common attrition time period (Mitchell & Selmes, 2007). However, the third or fourth appointment is still relatively early in the therapeutic process, and the more significant interaction findings have been reported from studies with significantly longer timescales (Tyrell *et.al*, 1999; Dozier *et al.*, 1994). A plausible explanation could therefore be that, as the therapeutic relationship develops, clinicians and patients become more attached to each other. In these circumstances, the clinician attachment system is more likely to be influential to the therapeutic alliance.

As therapeutic alliance is not a fixed entity, it is likely to fluctuate throughout the course of therapy. Measuring it at one single time point may therefore lead to misinterpretations of its development. Variations across different time periods have been reported (Sauer *et al.*, (2003) and a valuable addition to the findings from this study would be to include additional measurements of therapeutic alliance throughout the course of treatment.

5.1.7 Clinicians' experience and job satisfaction

The reported study also explored therapist attachment in relation to preferred therapeutic model. The large majority of therapists reported favouring a CBT model, and given the low levels of anxious and avoidant attachment, it was not possible to investigate the relationship between attachment styles and therapeutic models. The sample of therapists in this study therefore represented securely attached clinicians preferring to work with a CBT approach. No relationships were found in the examination of therapist attachment patterns and job satisfaction and rewards of clinical work. These factors were considered in relation to some limited research suggesting insecure anxious attachment within therapists can lead to 'compulsive caring' resulting in over involvement or higher levels of emotional stress and burnout (Wilkinson, 2003). However, this was not evident in the reported study.

One significant relationship that did emerge was the finding that length of experience of the therapist was negatively related to general job satisfaction. This variable of job satisfaction included the general management of the service, including the referral process, DNA policy and caseload management. One possible interpretation could be that this dissatisfaction relates to the continual difficulties and frustrations of managing patient engagement problems, missed and cancelled appointments and the resulting waste of clinical time. This is only considered at a speculative level in response to some limited qualitative comments provided by participating therapists, and was not specifically explored within the study.

5.2. Strengths of the research

The reported study is an interesting development to the sparse literature on attachment patterns in psychological therapy. As previously highlighted through the literature review, very few studies have measured both patient and therapist attachment patterns and explored the interaction between them. This research, therefore, aimed to expand on the limited understanding of this potentially valuable area of development.

Given that the vast majority of previous research has been conducted with student trainees working with volunteer clients, very little is known about the influence of attachment patterns of qualified and experienced clinicians and patients with significant psychological problems (Daly & Mallinckrodt, 2009). A significant strength of this study is the fact it was carried out within 'real' clinical settings. The therapeutic dyads were representative of routine practice, comprising experienced clinicians and patients suffering from a range of psychological difficulties. The setting and participants, therefore, increase the strength of the study and the ability to generalise the findings to other clinical populations.

With regard to sample size, although it was unable to provide sufficient power for some of the analysis, the reported study is one of the largest within this area of research conducted within 'real world' clinical settings. This highlights the common difficulties of conducting research with clinical populations, and the reported study is certainly comparable to established studies within this field.

A further strength of the study is the use of multiple ratings of the working alliance. Again, previous research has tended to focus on patient ratings only, and the additional rating reduces the risk of misinterpretation and provides richness to the data, allowing for a greater understanding of this process.

5.3. Limitations of the study

As already highlighted, the study did fail to recruit the required number of participants to provide sufficient power to fully answer some of the research questions. This was particularly related to the low number of therapists, despite the researchers best efforts to promote and recruit eligible participants. As a result, this limits the conclusions that can be drawn. It is, therefore, unclear whether the lack of significant findings in relation to therapist attachment styles may reflect Type II error as a result of having insufficient sample size to detect significant relationships and differences.

The small levels of attrition may suggest that therapists were selective in the patients they invited into the study. (Patients were encouraged to ask all new patients commencing therapy). There were also some concerns that avoidant patients would be less likely to participate in the study, in relation to their dismissing attachment models. These design issues were difficult to control for, but they do not appear to have come into fruition. However, the strong representation of securely attached therapists could perhaps suggest a bias in the recruitment of clinicians. As participation was voluntary, therapists were free to decide whether to consent to take part in this research and this might have led to anxious or avoidant therapists opting not to participate. Therefore, as a result of voluntary participation, it may be that our sample is less representative of the larger therapist population.

An alternative explanation for the low levels of anxious and avoidant attachment reported by therapists could be related to their familiarity with attachment theory and the questionnaire measure used. Although anonymity was ensured, therapists may still have provided responses to appear more securely attached. The resulting reduced validity is one of the main limitations with self-report measures. As previously explained, this method of measurement was selected for pragmatic purposes, given the need for larger sample sizes. However, a potential development to this study could be to interview therapists with the AAI to reduce the opportunity of biased responses.

5.4. Further research and developments

In relation to the limitations discussed above, this study highlights the need for larger sample studies with sufficient power to be able to draw firmer conclusions. The existing literature is very limited and the influence of attachment within psychological therapy remains a relatively underexplored and untested area of research. This is quite surprising given that psychological therapy is an interpersonal process, where attachment dimensions will have clear implications for its development (McBride *et al.*, 2006).

With some consistent findings emerging to suggest insecure patient attachment is predictive of poor working alliance, further research is required to build on this and to explore the therapist's role in the development of an effective clinical alliance. This study has suggested that the attachment patterns of less anxious and avoidant therapists are not directly related to therapeutic alliance. However, an increase in the number and size of research on this is required to understand this better, and learn more about the interaction of dyadic attachment patterns.

5.5. Clinical Implications

The implications of this study and of the clinical application of attachment theory are quite considerable. The important confirmation that greater levels of anxiety and avoidant attachment were predictive of reported psychological distress is an important finding when considering the patient groups most likely to be referred for psychological interventions. This highlights the potential challenges faced by practising clinicians to engage and develop positive therapeutic alliances with a largely insecure population group

The significant finding that avoidant attachment is associated with poor appointment attendance has important implications for clinical services in how to promote engagement with such avoidant patient groups. As this study has suggested, it is likely that these patients will struggle to attend appointments. Due to their negative internal models, they may be more dismissive of the support from others and engage in deactivating techniques to cope with psychological distress. With greater attachment avoidance and insecurity associated with greater levels of distress, the crucial issue is to know how to engage and work with avoidant patients and challenge their unhelpful internal models. Thus, if the therapist is able

to form a therapeutic alliance, the psychological difficulties may reduce, given the intrinsic link between attachment patterns, interpersonal problems and psychological distress.

The development of alliance with insecure patients is likely to take a longer time than with more secure patients (Slade, 2008). In light of this, the problem is how to manage poor appointment attendance in the current economic pressures of limited resources and high demand for psychological services. Service and department policies often dictate that, after a certain number of missed appointments, patients should be discharged from the service. Although these mental health service policies are somewhat understandable within the context of pressurised resources, it reduces or even removes the service's capacity to meet the needs of insecurely attached patients (Holmes, 1994). Such exclusive service provisions and strict discharge policies could ultimately be harming instead of helping patients, by repeating and perpetuating the experience of rejecting and damaging attachments (Goodwin, 2003).

The problems are far easier to outline than the answers and there are no easy solutions to these complex service issues. However, if services continue to follow current practices, a significant proportion of distressed individuals may remain excluded from support. Given the strong link with levels of psychological distress and attachment insecurity, the excluded group is likely to be the most vulnerable individuals, who are in need of the greatest help. Furthermore, although discharge policies may help to manage service demands in the short term, the likelihood is that individuals with insecure attachments will continue to suffer and present back to mental health services as their distress increases.

One potential development to help manage this difficult dilemma could be to apply more attachment theory principles to the service organisation. The first step in this process might involve the introduction of an attachment measure as part of a standard assessment battery. This could help inform psychologists of patient's attachment styles and raise awareness of potential difficulties with appointment attendance, engagement and alliance and help therapists to anticipate potential challenges (Shorey & Snyder 2006).

In addition, having an understanding of patient's attachment during the assessment process, a further development could be to enhance clinicians' awareness of their own attachment patterns and how to apply attachment theory to their clinical practice. This could be further supported through better understanding of attachment-based adaptations and modifications

of their interpersonal style to encourage engagement with patients who find it difficult to utilise services. These developments could help to improve service engagement, therapeutic alliance and reduce cancellations, DNA (did not attend) rates and wasted clinical resources.

There is a necessary requirement to update service organisation and adjust current practice to meet the needs of everyone suffering from psychological distress and not just patients with secure attachment patterns who can attend and engage with the therapeutic process. As standard one-hour therapy sessions may be overwhelming to patients with attachment insecurities, flexible and innovative adaptations may be more useful. These could include pre-therapy appointments, shorter appointments, one-off solution focused appointments and open advice clinic approaches to help socialise the more insecure patients into the therapeutic process. The intensity of these interventions could be gradually increased to help engage clients and start work on challenging their internal models.

These developments could be beneficial to clinicians too, as adapting practices to promote engagement with challenging patients could help to reduce frustration and demoralisation, and improve morale. However, although many clinicians are interested in attachment research, there seems to be a lack of understanding as to how to apply it to their practice and everyday work. Knowing about patients' attachment style is therefore only useful if it is tied into meaningful interventions and techniques (Slade, 2008), and that is where further work is required.

5.6. Conclusions

The findings from this study add to the current literature on attachment in psychological therapies. As this paper has highlighted, attachment patterns (both anxious and avoidant) are predictive of reported psychological distress. Patient attachment insecurity was related to difficulties engaging in the therapeutic process through appointment attendance and developing an effective therapeutic alliance. These significant findings are most useful in understanding the patient groups referred to mental health services, and the difficulties they have in accessing and utilising support.

The additional exploration of therapist attachment patterns did not reveal associations with early engagement or therapeutic alliance and no interaction effects were found. The lack of

significance in relation to therapist attachment may be related to the small sample size however, and larger research studies are recommended.

The clinical implications of attachment theory are vast, and further research is recommended to build on current knowledge. Through developing our understanding of attachment patterns within the therapeutic process, it is hoped that improvements can be made to services to reach out to the more vulnerable individuals. A development to promote engagement with insecure individuals is one specific area that requires further attention. This should be aimed at creating more inclusive services for the most vulnerable, insecure patient groups.

6. Journal Article

Article title: **Attachment in psychological therapy: An exploratory study into patient and therapist attachment patterns on engagement and therapeutic alliance**

Abbreviated running head: Attachment in psychological therapy

Journal article word count = 5002

This Journal article chapter is written for the submission to the *Psychology and Psychotherapy: Theory, Research and Practice*. It is therefore formatted in accordance to the ‘author guidelines’ for the journal (included in Appendix vii).

Abstract

Objectives. Recent research into attachment theory has suggested insecure attachments can interfere with the process of psychological therapies. Previous literature has focused on patient attachment styles, with less understanding of the role of therapist attachment. In particular, how patient and therapist attachment patterns interact within therapeutic dyads may influence the engagement process into therapy as well as the development of the therapeutic alliance.

Design. Patient and therapist participants starting a new psychological therapy completed self-report measures of attachment, psychological distress and working alliance.

Methods. Patients (n=55) attachment styles were compared to self-reported psychological distress, early engagement (measured through appointment attendance) and working alliance ratings. Therapists (n=38) attachment style was also compared to working alliance and dyadic interactions of both patient and therapist attachments were explored.

Results. Patients presenting to mental health services reported high levels of anxious and avoidant attachment patterns, which were predictive of greater psychological distress. Patient avoidant attachment was associated with poor engagement and both patient anxiety and avoidant attachments were predictive of lower therapeutic alliance. Therapists reported greater attachment security, which was unrelated to early engagement or therapeutic alliance, with no significant interactions between patient and therapist attachments patterns.

Conclusions: Applying the principles of attachment theory to clinical practice could provide greater insight to the interpersonal dynamics and help to inform services how to improve engagement and alliance with insecure patients.

Abstract word count = 225

Practitioner Points:

- High levels of anxious and avoidant attachment styles associated with greater psychological distress within patient population
- Avoidant attachment styles predictive of early engagement difficulties
- Anxious and avoidant patient attachments can interfere with the quality of the therapeutic alliance
- Therapists reported greater attachment security, although their attachment patterns were not significantly associated with the early therapeutic process

Introduction:

Overview of attachment theory

Attachment theory has emerged as a potential model for the understanding the interpersonal dynamics of psychological therapies (Goodwin, 2003). Although primarily focused on infant and caregiver relationships, it can also offer a framework for understanding how adults form and develop therapeutic relationships. Within the close, care-seeking / care-giving nature of the therapeutic process, the clinician's role has been paralleled to that of an attachment figure to the patient, providing '*a secure base*' for the exploration of difficult and distressing experiences (Bowlby, 1988). The help-seeking process of accessing services has also be considered as essential attachment behaviour.

Bowlby's attachment theory explains how early caregiving relationship experiences shape the development of 'internal working models', which provide a system for individuals to perceive and respond to interpersonal information and lay the foundation of the development of mental representations of the 'self' and 'others' (Bowlby, 1969/1982). Secure attachment patterns develop in conditions where infants experience their attachment figures as available, responsive and able to minimise danger and distress. Individuals with secure internal working models will therefore seek proximity to attachment figures to relieve distress and form positive expectations for future relationships (Bowlby, 1988).

However, if an infant experiences any disruptions in the attentiveness and reliability of the caregiver in childhood, insecure attachment patterns can emerge. As a result of their negative working models, insecure individuals may develop alternative strategies during times of distress and form negative views of future relationships (Mikulincer & Shaver,

2007). In the case of avoidant attachment patterns, rather than seeking proximity to attachment figures, individuals deny their attachment needs and attempt to become self-reliant. In stark contrast, individuals with anxious attachment patterns can become overly dependent on others and excessively seek proximity to attachment figures.

Attachment and psychological difficulties

Interpersonal difficulties and related social isolation can increase vulnerability to the development of mental health problems and there are a growing number of studies that report connections between insecure attachment patterns, psychopathology and psychological problems (Daniel, 2006). Furthermore, individuals with insecure attachment may be less likely to seek help from others (Vogel & Wei, 2005) and their internal negative representations may also interfere with them experiencing the therapeutic process as valuable or helpful (Romano *et al.*, 2008).

Further difficulties are more likely to emerge if the insecure patient's internal working models are confirmed through the process of therapy, resulting in disengagement or a therapeutic stalemate (Liotti, 2007). Attachment issues can therefore make engaging with clinical services extremely challenging, resulting in the more vulnerable individuals most in need of help, failing to access or utilise the support available to them.

Attachment and the therapeutic process

Previous research therefore suggests patient attachment patterns may be relevant to engagement, the process and outcomes of psychological therapies (Levy *et al.*, 2011).

Having an understanding of an individual's attachment behaviours could enhance awareness to how they might respond to therapy and help to anticipate potential challenges and ruptures within the psychological process (Goodwin, 2003). However, given the fundamental interpersonal process and interaction of psychological therapies, research into the influence and role of attachment styles is surprisingly sparse (McBride *et al*, 2006). The current literature has largely focused on patient attachment and therapeutic alliance with a small, but growing body of evidence to suggest insecure attachment patterns can undermine the strength of alliance (Diener & Monroe, 2011).

Further work is needed to establish the nature of the relationship between attachment and therapeutic alliance and understand *how* insecurity interferes with its development. Certainly the contribution of the clinician is vital in helping us to understand how alliance is formed. Less is known about therapist attachment patterns however, although some research has suggested they are more likely to report secure attachment patterns (Leiper & Casares, 2000). Secure attachment in clinicians is considered to be important in managing difficulties in therapy (Black *et al.*, 2005) and has been related to being able to respond more empathically to patients needs (Dozier *et al.*, 1994; Rubino *et al.*, 2000).

Individual differences of attachment patterns are also likely to influence how a clinician works with a patient, both in terms of their interpersonal style and choice of therapeutic modality they work in. There has been some research to suggest that therapists adapt their responses and method of working in relation to patient attachment styles, adopting more affective and interpersonal techniques with overinvolved, anxious patients, and more cognitive approaches with avoidant, dismissive patients (Rubino *et al.*, 2000; Hardy *et al.*, 1998). Although these approaches make intuitive sense, it still remains unclear whether it is helpful to respond 'in style' to attachment patterns of patients and what other factors

influence a therapist's response (Slade, 2008). Further research is therefore needed to explore all of these factors and how they contribute to the process and experience of therapy.

As highlighted in a systematic review of patient and clinician attachment styles in psychological therapy (Barron, 2012), empirical research into the patient/clinician dyadic attachment interaction is limited. Secure attachment is generally associated with stronger alliance (Bruck *et al.*, 2006; Fuertes *et al.*, 2007) however some tentative findings from the limited current research suggest contrasting attachment patterns of patients and clinicians may also strengthen alliance (Petrowski *et al.*, 2011; Bruck *et al.*, 2006; Sauer *et al.*, 2003; Tyrrell *et al.*, 1999).

The authors discuss these findings in relation to the disconfirming process that arises through the experience of working with dissimilar attachment models, that challenge existing patterns and facilitate change and growth (Tyrell *et al.*, 2009). However the length of the patient-clinician relationship is likely to contribute to these processes, and it is unclear whether dissimilar attachment patterns may work to the same effect during early engagement and alliance at the start of an intervention (Sauer *et al.*, 2003). It may be that attachment patterns have more of an impact on alliance as it develops over time (Eames & Roth, 2000).

Aims of the present study

This current study therefore aims to investigate the role of attachment in the initial stages of psychological therapy. In particular patient attachment patterns and the interaction between patient and clinician attachment patterns will be explored in relation to patient engagement with services and therapeutic alliance.

The first aim of the reported study attempts to explore the attachment patterns of patients presenting to psychological services and clinicians delivering psychological therapies. It is predicted that patients will report high levels of anxious and avoidant attachment patterns, which will be related to self-reported psychological distress. Clinicians delivering psychological therapies will have more secure attachment patterns

The second aim is to explore whether patient attachment patterns influence early engagement with mental health services and working alliance in psychological therapies. It is predicted that patients reporting lower levels of anxious and avoidant attachment patterns will be more likely to attend appointments and will develop more positive working alliances (as rated by both patients and clinicians).

The third aim is to explore the interaction between patient and clinician attachment patterns on engagement and therapeutic alliance. It is predicted that higher ratings of working alliance will be reported when clinicians are more securely attached and when clinicians and patients have contrasting attachment styles.

Methodology

The South East Scotland Research Ethics Committee (01) granted ethical approval for this study via the Integrated Research Application System (IRAS).

Design

A non-experimental observational design was adopted to explore the role of attachment with minimal manipulation to the therapeutic environment. This allowed patients to receive treatment as usual, thus avoiding any ethical issues of interfering with or restricting treatment in any way. Within the reported study a questionnaire-based cross-sectional design was used to measure attachment styles, engagement and therapeutic alliance.⁴

Participants

Both patient and clinician participants were included in the exploration of therapeutic dyads. All practicing clinicians qualified or in training to deliver psychological interventions were eligible and invited to participate in this study, which resulted in 38 (30.2 per cent) providing consent to take part in the study. Any new outpatient (+18 years) commencing a new psychological intervention was eligible to participate. No exclusion criteria were applied in relation to diagnosis or presenting problem. One hundred and thirty-two research packs were distributed to patients, from which 55 (41.7 per cent) provided informed consent to participate.

Measures

Three questionnaire measures were used in the study:

1. The **Clinical Outcomes in Routine Evaluation-Outcome Measure** (CORE-OM; CORE Systems Group 1998) was used as a self-report measure of psychological distress. It is a widely used outcome measures for psychological therapies with good validity and reliability (Barkham *et al.*, 2001). The 34 items in the CORE-OM comprise four domains; *well-being* (four questions), *problems/symptoms* (twelve questions), *social functioning*

⁴ The reported study is part of a larger pilot study on attachment theory that examines clinical outcomes in addition to the engagement and therapeutic alliance variables addressed in this paper.

(twelve questions) and *risk* (six questions). Clinical scores are calculated as the mean of all completed items, with higher scores indicative of greater psychological distress.

2. The **Experiences in Close Relationships Scale** (ECRS; Brennan, Clark & Shaver, 1998) was selected as it is one of the most commonly used self-report measure of adult attachment (Fraley & Philips, 2009). It has also been reported as a highly reliable and valid measure (Wei *et al.*, 2007). The 36-item self-report inventory measures adult attachment through two fundamental dimensions: attachment-related anxiety (i.e., the extent to which people are insecure vs. secure about the availability and responsiveness of others) and attachment-related avoidance (i.e., the extent to which people are uncomfortable being close to others vs. secure depending on others).

The ECRS consists of 36 statements about close relationships, and individuals are required to rate the statements from 1 (*disagree strongly*) to 7 (*agree strongly*), with point 4 being neutral. Respondents are therefore scored on both the anxiety and avoidant dimensions, rather than classified as having a particular attachment style. Mean scores are used, with higher scores on the *Anxiety* and *Avoidant* subscales indicative of higher levels of attachment anxiety and avoidance.

3. The **Working Alliance Inventory** (WAI-s; shortened client & therapist versions; Tracey & Kokotovic, 1989). The 12-item shortened WAI-s was derived from the 36-item original version (Horvath & Greenberg, 1989) and is one of the most frequently used questionnaires for measuring therapeutic alliance. It was developed specifically for use in the early phase of therapy (Eames & Roth, 2000), which made it particularly suitable for use in the reported study. Strong internal consistency reliability has been frequently reported (.95) for therapist

and (.98) for patient, along with concurrent and predictive validity (Tracey & Koktovic, 1989).

The measure was developed in relation to Bordin's three-dimensional model of alliance; which incorporates task, bond and goals (Bordin, 1979). Respondents rate each of the 12 items using a 7-point rating scale from 1 (never) to 7 (always) to measure the quality of the working alliance. Total scores range from 12 to 84 where higher scores are indicative of stronger working alliance. Scores can also be calculated for three sub-domains; Bond, Goals and Tasks (minimum=4; maximum=28). There are three different versions of the WAI-s questionnaire for patient, therapist and observer and for the reported study, both the patient and the therapist versions of the WAI-s were used.

Procedure

The above measures, along with the research information sheets and consent forms were organised into individual research packs. Consenting clinicians were provided with a coded research pack (containing the research information sheets, consent forms and questionnaire measures). The use of an ID coding system allowed for questionnaires to be returned anonymously but allowed for patient and clinician data to be linked up. Both patients and clinicians received clear instructions to write their unique research code on all measures and envelopes that they completed to facilitate this process.

Clinicians completed a self-report attachment measure; the ECRS (Brennan *et al.*, 1998), and provided some demographic information. Patients were invited to participate in the study by their clinician at their first appointment. Clinicians provided the relevant research pack

containing the patient information sheet, consent form and initial questionnaire pack including the CORE (CORE-OM; Systems Group 1998) and the ECRS (Brennan *et al.*, 1998) to the patient.

During the time between the third and fourth sessions, both patients and clinicians were required to complete their respective versions of the Working Alliance Inventory (WAI-s; Tracey & Kokotovic, 1989). The selected time period was chosen to focus on the formation of the *early* therapeutic alliance. To reduce bias in the responses, patients and clinicians were asked to complete the WAI-s independently in private.

Analysis

To test for differences between attachment patterns and patient variables, and therapist attachment patterns independent t-tests were performed. Also, to examine the relationship between attachment patterns and levels of psychological distress, correlational analyses were used. Multiple regression analyses were used to explore the relative contribution of patient attachment (anxiety and avoidance variables) on psychological distress and therapeutic alliance and hierarchical regression analyses to explore possible interactions between attachment styles.

Priori Power Calculations

A sample size of 67 participants was indicated for the multiple regression analysis to detect a medium effect size ($f = 0.15$) with power at .80 (Cohen, 1992).

Results

Fifty-five patients consented to take part in the study and completed first appointment measures. From this sample, 39 (70.9 per cent) were females and ages ranged from 18 – 73 years (mean age = 39.9; SD = 13.07). The patients were all attending adult mental health services as outpatients, with 36 (65.5 per cent) suffering from either or both depression and anxiety difficulties. The other presenting problems included personality issues (9.1 per cent), eating disorders (9.1 per cent), trauma (7.3 per cent), chronic fatigue (3.6 per cent), psychosis (1.8 per cent) and bi-polar disorder (1.8 per cent). Eighteen (32.7 per cent) of the patients had received previous psychological interventions.

Thirty-eight clinicians consented to take part in the study, 32 (84.2 per cent) were female. The overall level of experience ranged from 0 – 31 years (mean = 10.89; SD = 8.65). Cognitive behavioural therapy (CBT) was the preferred therapeutic model, with 30 (78.9 per cent) of the clinicians rating it as their first choice of modality. Cognitive analytic therapy (CAT) was the second highest rated model (15.8 per cent), with solution-focused (2.6 per cent) and mindfulness (2.6 per cent) the other two models of choice.

The demographic data indicated that both the patient and clinician samples were considered to be representative of routine patient referrals and the general workforce of local psychological services.

Patient and clinician attachment patterns

Mean scores from the Experience Close Relationships Scale (ECRS) for anxious attachment and avoidance attachment were calculated for both the patients and clinicians, shown in *Table 4.1*. These were compared to the available norms for the ECRS⁵;

Table 4.1: Mean scores and Std. Deviation of anxious and avoidant attachment patterns

	N	Mean	Std. Deviation
Patient anxious attachment	55	4.43	1.24
Patient avoidant attachment	55	4.38	1.18
Clinician anxious attachment	38	2.01	0.85
Clinician avoidant attachment	38	2.35	0.85
<i>ECRS norm anxious attachment</i>	<i>22,000</i>	<i>3.64</i>	<i>1.33</i>
<i>ECRS norm avoidant attachment</i>	<i>22,000</i>	<i>2.93</i>	<i>1.18</i>

One sample t-tests were therefore conducted to compare the patient and clinician attachment mean scores with the ECRS norm means (shown in Table 4.2). The patient's mean scores were significantly higher than the norm means on both dimensions indicating higher levels of insecure attachment. In contrast, clinicians' attachment scores were significantly lower than the ECRS norm mean on both dimensions indicating high levels of secure attachment.

⁵ Based on a sample population of 22,000 (78 per cent female) with a mean age of 24 (SD = 10), (Fraleigh *et al.*, 2000).

Independent-samples t-tests were also conducted to compare the anxiety and avoidance attachment scores for patients and clinicians. Significant differences were found with patients reporting significantly higher levels of attachment anxiety and avoidance than clinicians, as shown in Table 4.2.

Table 4.2 One sample and independent t-tests between ECRS norms, patients and clinicians

Comparison groups	(df)	t	p value	Cohen's d	Effect size
One Sample: Patient / ECRS Norms					
- anxious attachment	54	4.75	<.000	1.29	0.54
- avoidant attachment	54	9.08	<.000	2.47	0.78
Clinician / ECRS Norms					
- anxious attachment	37	-150.09	<.000	49.30	0.99
- avoidant attachment	37	-159.78	<.000	52.52	0.99
Independent: Patients / Clinicians					
- anxious attachment	91	11.18	<.000	2.34	0.76
- avoidant attachment	91	9.60	<.000	2.01	0.71

Patient attachment and psychological distress

To explore the relationship between patient attachment patterns and self-reported levels of psychological distress, Pearson product-moment correlation analyses were conducted and results are shown in Table 4.3. No significant correlation was found between the patient anxiety and avoidance attachment variables: $r = .23$, $n = 55$, $p = .095$.

Table 4.3 Pearson product-moment correlations between patient attachment anxiety & avoidance and psychological distress

N= 53	Patient Anxiety	Patient Avoidance
CORE Total	.525**	.447**
CORE Wellbeing	.576**	.331*
CORE Problems/ symptoms	.456**	.347*
CORE Functioning	.535**	.522**
CORE Risk	.361**	.442**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The CORE mean total score and the four sub-scores (wellbeing, problems/symptoms, social functioning and risk) were all significantly correlated with both anxiety and avoidant attachment scores, mostly $p < .01$.

Multiple regression analysis was therefore carried out to assess the ability of patient attachment to predict levels of psychological distress. Patient anxious and avoidant attachment were entered as the two predictor variables and the total core score as the outcome variable through a standard *enter* model. The regression model was significantly predictive of psychological distress; $F(2, 50) = 15.90$, $p < .000$, (R Square = .389), explaining 38.9 per cent of the variance. Both attachment variables were significant predictors, with anxious attachment recording a slightly higher β value than avoidant attachment as shown in Table 4.4.

Table 4.4 Multiple regression analysis predicting of psychological distress from patient attachment

	B	SE B	β	t
Anxious attachment	.32	.08	.45***	3.93
Avoidant attachment	.26	.08	.35**	3.04

p < .05*, p < .01**, p < .001

A post-hoc power calculation indicated the regression model had a power value of 0.99 ($\alpha = 0.05$, with two predictor variables, R Square = 0.39). Patient attachment (both anxious and avoidant) patterns were therefore predictive of reported psychological distress.

Patient attachment and early engagement

At the time of analysis, data for the attendance at the first five appointments were available for 50 patients. Of these 50 participants who began a new psychological intervention, four (8 per cent) dropped out of treatment during the first five appointments. The number of appointments attended (out of the first five scheduled appointments) is shown in Table 4.5, in relation to mean anxiety and avoidant scores.

Table 4.5. Mean scores of anxiety and avoidant attachment in relation to appointment attendance

Appointments attended (of first 5)	N	Mean (SD)	
		Anxiety	Avoidance
2	4	4.97 (.62)	5.40 (1.24)
3	23	4.38 (1.27)	4.80 (1.18)
4	13	4.71 (.88)	4.12 (.92)
5	10	4.42 (1.21)	3.53 (.83)

The relationship between early appointment attendance, psychological distress and attachment anxiety and avoidance was explored through Pearson product-moment correlation analyses, shown in Table 4.6.

Table 4.6. Pearson correlations of patient attachment, psychological distress and appointment attendance

n=50	Patient anxiety	Patient avoidance	CORE Total (psychological distress)	no of appts attended (first 5)
Patient anxiety	.-	.228	.525**	-.167
Patient avoidance		.-	.447**	-.488**
CORE Total (psychological distress)			.-	-.258

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Patient attachment avoidance showed a strong negative correlation with attendance of first appointment ($n=50$, $r = -.488$, $p > .000$).

Patient attachment and therapeutic alliance

At the time of analysis, data on the working alliance was available for 43 therapeutic dyads.

Overall both patient and therapist ratings on the WAI-s were high:

Table 4.7. Patient and therapist mean ratings on the WAI-s

	Mean	(SD)	Range
Patient total rating	63.50	(12.89)	31 - 84
Therapist total rating	66.55	(10.86)	33 – 82

WAI-s total possible ratings min=12, max=84 (median = 48)

To explore the relationship between patient attachment and working alliance, Pearson product-moment correlation analyses were carried out, shown in Table 4.8. Significant relationships were revealed in relation to both attachment groups and all WAI categories.

Table 4.8. Pearson correlations for patient attachment & WAI

(n=43)	patient				
	avoidance	WAI total	WAI task	WAI bond	WAI goal
patient anxiety	.228	-.397**	-.368*	-.325*	-.388*
patient avoidance	—	-.461**	-.475**	-.322*	-.463**
WAI total		—	.907**	.887**	.923**
WAI task			—	.683**	.800**
WAI bond				—	.711**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Multiple regression analysis was conducted to assess the ability of patient anxiety and avoidant attachment to predict therapeutic alliance ratings. Using a standard *enter* model, patient anxiety and avoidant attachment were entered as the two predictor variables, with total working alliance (patient rating) as the outcome variable. The regression model was statistically significant in predicting the total working alliance score, $F(2, 40) = 8.67$, $p < .001$, (R Square = .302) explaining 30.2 per cent of the variance.

Table 4.9. Multiple regression analysis predicting working alliance from patient attachment

	B	SE B	β	t
Anxious attachment	-3.21	1.42	-.31*	-2.27
Avoidant attachment	-4.24	1.47	-.39**	-2.88

p < .05*, p < .01**, p < .001

Post-hoc power calculation showed the regression model had a power value of 0.97 ($\alpha = 0.05$, two predictor variables, R Square = .30). Patient attachment (both anxiety and avoidant) patterns were therefore predictive of therapeutic alliance.

Therapist attachment, early engagement and therapeutic alliance

Pearson product-moment correlation analyses were conducted to first test the relationship between therapist attachment (anxiety and avoidance), patient early engagement (appointment attendance) and working alliance (both patient and therapist WAI-s ratings). The correlation figures are shown in Table 4.10.

Table 4.10. Pearson correlations with therapist attachment variables

(n = 43)	therapist avoidance	no of appts attended (first 5)	WAI total (patient rating)	WAI total (therapist rating)
therapist anxiety	.276	-.092	-.034	-.168
therapist avoidance	.-	-.050	.181	-.009
no of appts attended (first 5)		.-	.248	.176
WAI total (patient rating)			-	.656**

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

As no relationships were therefore found between therapist attachment patterns, engagement and therapeutic alliance, multiple regression analyses were not carried out.

Interaction between patient and therapist attachment

To explore the interaction between patient and clinician attachment, moderation multiple regression analysis was carried out. The interaction was tested by creating new attachment interaction variables (or product terms), produced by multiplying the predictor (patient attachment) and moderator (clinician attachment) variables together (Aiken & West, 1991).

The interaction was tested by creating four new attachment interaction variables: *patient anxiety*therapist anxiety*, *patient anxiety*therapist avoidance*, *patient avoidance*therapist avoidance*, and *patient avoidance*therapist anxiety*.

Hierarchical multiple regressions were used to assess the interaction on the criterion variable: working alliance. The regression model included six predictor variables; two patient-level variables (anxiety and avoidant attachment patterns) and the four interaction variables.⁶

Patient attachment anxiety and avoidance were entered at Step1, explaining 28.9 per cent of the variance, as previously reported. In Step 2, the four attachment interaction variables were entered but the model was non-significant, indicating no interaction effects, as shown in Table 4.11.

⁶ In light of the small sample size, Type II error rate was controlled by the use of a familywise error rate of .10 when testing regression coefficients of significant models. Type I error rates were controlled within the model by conducting tests on individual regression coefficients at the 0.125 level.

Table 4.11. Hierarchical multiple regression analysis predicting working alliance (patient ratings) from patient and therapist attachment

Step/variable	R Square	Adj R Square	R Square change	F	df	B	SE	β
Main effects (Step1)								
	0.29	0.25	0.29	8.11**	2, 40			
P Anxiety						2.98	1.44	0.288
P Avoidance						4.17	1.54	0.378*
Interactions (Step2)								
	0.33	0.21	0.04	0.56	4, 36			
P Anxiety * T Anxiety						1.18	2.35	0.132
P Anxiety * T Avoidance						1.50	2.39	-0.10
P Avoidance * T Avoidance						2.11	2.35	0.144
P Avoidance * T Anxiety						3.16	2.30	-2.23

(N = 43), P = patient; T = therapist. *p<.01. **p<.001.

A post-hoc power calculation indicated the hierarchical regression model had a power value of 0.59 ($\alpha = 0.10$, with two predictor variables in Set 1 and four predictor variables in Set 4).

Discussion

Patient attachment

The patient sample group reported significantly higher levels of attachment anxiety and avoidance in comparison to both the norm mean (on the ECRS measure of attachment) and the therapist sample group. In addition, the therapist sample also reported significantly lower levels of anxiety and avoidance in relation to the norm mean measure.

As predicted, significant positive correlations between the self-report measure of psychological distress and both anxious and avoidant attachment were found. Further exploration through regression analysis revealed that both attachment anxiety and attachment avoidance were predictive of total psychological distress reported by patients. This finding is supportive of current literature on clinical applications of attachment theory, where insecure attachment patterns have been linked with higher vulnerability towards developing interpersonal and psychological problems (Holmes, 1997).

Patient attachment patterns were also related to early engagement, which was measured through appointment attendance of the first five appointments. Correlation analyses revealed a negative relationship between patient avoidant attachment and appointment attendance. However, there was no relationship between patient anxious attachment and appointment attendance.

In view of the deactivating strategies utilised by the avoidant patient, the process of therapy could be experienced as futile, with little to offer, or representative of a threat, which must be contained or avoided (Wallin, 2007). Difficulties with engagement can therefore be understood in relation to the attachment system and internal models. In relation to attachment avoidance, engagement problems may therefore be more prevalent in the early stages of therapy. An interesting sequel to this study would be to explore appointment attendance throughout the duration of treatment to determine whether avoidant attachment continues to influence engagement or whether this pattern balances out.

As hypothesised, patient attachment (both anxious and avoidant) patterns were significantly predictive of therapeutic alliance, where higher anxiety and avoidant attachment were related to lower ratings on the working alliance inventory. These findings are congruent with

previous literature which suggests that anxious and avoidant attachment patterns hinder the development of an effective therapeutic alliance (Mallinckrodt, 2000; Meyer & Pilkonis, 2001; Eames & Roth, 2000; Satterfield & Lyddon, 1998).

For the more anxious patients, fears of the therapist being unable to meet their needs or understand them may interfere with the development of a working alliance. In contrast, avoidant patients are more likely to dismiss the support of the therapist and the value of the therapeutic intervention (Wallin, 2007). Therefore, for very different reasons, patients with greater anxiety and avoidant attachment styles are more likely to have difficulty forming successful therapeutic alliances.

Therapist attachment & interaction with patient attachment

Contrary to the hypothesis that greater clinician security would be predictive of engagement and stronger working alliance, no significant findings emerged between these factors. The hypothesis that contrasting attachment styles between patients and clinicians would lead to stronger working alliances was also not supported and no interaction effects were found. One possible explanation to the lack of significant findings in relation to therapist attachment could be that their own attachment patterns are less influential on the therapeutic process. It may therefore be that engaging in a psychological intervention activates the patients attachment system only. This could be understood in relation to the distress and vulnerability patients may feel when they enter therapy in comparison to a clinician who is likely to be more relaxed and comfortable with the process.

The absence of an association between therapist attachment and working alliance might also be understood through the lack of variance in their reported levels of anxious and avoidant attachment patterns. The small sample size may have also contributed to this, and as some therapists recruited more than one patient, some of the ratings may have been influenced by the non-independent participation. The small effect size change ($f^2 = 0.042$) associated with the hierarchical regressions is also indicative that the study lacked sufficient power to detect any significant relationships and that a Type 2 error may have occurred.

Given that the vast majority of previous research has been conducted with student trainees working with volunteer clients, a significant strength of this study is the fact it was carried out within ‘real world’ clinical settings. The therapeutic dyads were representative of routine practice, comprising experienced clinicians and patients suffering from a range of psychological difficulties, thus increasing the generalisability of the study.

As already highlighted, the study did fail to recruit the required number of participants to provide sufficient power to fully answer some of the research questions. This was particularly related to the low number of therapists, despite the researchers best efforts to promote and recruit eligible participants. As a result, this limits the conclusions that can be drawn. It is, therefore, unclear whether the lack of significant findings in relation to therapist attachment styles may reflect Type II error as a result of having insufficient sample size to detect significant relationships and differences.

Implications for Clinical Practice

The implications of this study and of the clinical application of attachment theory are quite considerable. The important confirmation that greater levels of anxiety and avoidant attachment were predictive of reported psychological distress identifies a vulnerable population group that is likely to be referred for psychological interventions. It also highlights the usefulness and relevance of attachment theory in clinical practice and adult mental health, offering a framework for understanding interpersonal difficulties, including those within the therapeutic relationship. The findings also support the perpetuating nature of such relationship difficulties, and the strong link between insecure attachment patterns and psychopathology (Daniel, 2006).

The significant finding that avoidant attachment is associated with poor appointment attendance highlights the potential difficulties clinicians and services face when trying to engage with such patient groups. One potential development to help manage these challenges could be to apply more attachment theory principles to the service organisation. Clinicians could therefore be supported through greater attachment theory focus within clinical supervision and training, to. This could help clinicians increase their understanding of how attachment patterns may interfere with the therapeutic process, and help them to anticipate potential difficulties with appointment attendance, engagement and alliance as well as becoming more aware of their own attachment styles (Shorey & Snyder 2006).

As the findings from this study and related research suggest, insecure attachment is likely to interfere with patients' ability to make use of psychological help. They are more likely to miss appointments, fear rejection and abandonment and test therapeutic boundaries. However discharging avoidant patients who find attending appointments difficult or offering additional appointments to anxious patients who fear being discharged is likely to be

unhelpful and could ultimately be harming instead of helping patients, by repeating and perpetuating the experience of rejecting and damaging attachments (Goodwin, 2003).

This highlights a wider service issue of how to manage attachment issues in relation to appointment attendance within the current economic pressures of limited resources and high demand for psychological services. Although mental health service policies are somewhat understandable within the context of pressurised resources, strict discharge policies reduce or even remove the service's capacity to meet the needs of insecurely attached patients (Holmes, 1994).

Future developments and conclusions

In relation to the limitations discussed above, this study highlights the need for larger sample studies with sufficient power to be able to draw firmer conclusions. Exploring attachment throughout the duration of a psychological intervention would also be a useful addition to the findings on early stages of therapy. The existing literature is very limited and the influence of attachment within psychological therapy remains a relatively underexplored and untested area of research (McBride *et al.*, 2006).

There is a necessary requirement to update service organisation and adjust current practice to meet the needs of everyone suffering from psychological distress and not just patients with secure attachment patterns who can attend and engage with the therapeutic process. Through developing our understanding of attachment patterns within the therapeutic process, it is hoped that improvements can be made to services to reach out to the more vulnerable, insecure individuals.

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-- APPENDICES --